



**BAR CODE MED ADMIN
(BCMA)
Manager User Manual**

Version 1.0
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Department of Veterans Affairs
VISTA Technical Services

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1 OVERVIEW

1.1 What is BCMA?

BCMA software is a point-of-care solution for validating the administration of medications. The initial software development and hardware research done at the Eastern Kansas Health Care System, Colmery-O'Neil Division, VISN 15, Heartland Veterans Health Network, is the basis from which the standard product is being built. The existing software functionality, in addition to enhancements identified by a functional workgroup with Nursing and Pharmacy representatives from various Veterans Integrated Services Networks (VISNs), is being replicated with a graphical user interface (GUI) (MS Windows-based) client/server architecture.

Automation of the medication administration process will improve medication administration accuracy and increase the efficiency of documentation. As each patient wristband and medication is scanned by a bar code reader, the software will validate that the medication is ordered, timely, and in the correct dosage—as well as electronically update the medication administration history. BCMA software offers a tool to augment, not replace, the clinical judgment of the medication administrator.

1.2 Features of BCMA

BCMA:

- Increases medication administration accuracy
- Captures drug accountability data
- Increases the information available to Nursing staff at the patient point of care
- Reduces wasted medications
- Improves communication between Nursing and Pharmacy staffs
- Provides a real-time Virtual Due List of orders for medication administration
- Records refused medications
- Records missing doses and sends the requests electronically to the Pharmacy
- Provides a point-of-care data entry/retrieval system
- Provides full compatibility with the existing **VISTA** system
- Identifies PRN entries that require effectiveness comments
- Replaces the manual Medication Administration Record (MAR) with a Medication Administration History (MAH) to provide an automatic record of a patient's medication administration information
- Provides a list of variances that identify early or late medication administrations and late PRN effectiveness entries

1.3 Intranet Documentation

Documentation for this product can now be found on the Intranet at the following address:

<http://www.vista.med.va.gov/bcma>

At this address is information about BCMA, including background, technical information, and important user documentation.



Remember to bookmark this site for future reference.

1.4 About This Manual

This manual contains a description of the BCMA functions that users holding the PSB security key must know in order to use the application. Section 2, Setting Site Parameters in GUI, describes how to access BCMA and set site parameters using the GUI application. Section 3, BCMA CHUI Menu—Manager Option, describes how to use the CHUI manager functions of BCMA. The site parameters that can be set in GUI can also be set in the CHUI application. This section is organized around the Manager Option Menu and includes sample screens, sample reports, and detailed instructions for using the Manager options.

A glossary and index and are located at the end of this manual.

1.4.1 Special Instructions for the “First Time” Computer User


Users who are unfamiliar with BCMA or other Veterans Health Information Systems and Technology Architecture (**VISTA**) software applications are encouraged to study the DHCP Decentralized Hospital Computer Program (DHCP) *User’s Guide to Computing*. This orientation guide is a comprehensive handbook benefiting first-time users of any **VISTA** application. The purpose of the introductory material is to help users become familiar with basic computer terms and the components of a computer. It is reproduced and distributed periodically by the Kernel Development Group. To request a copy, users should contact their local Information Resources Management (IRM) staff.

1.4.2 Special Notations—Documentation Conventions

Responses in bold face indicate what the user is to type in. Example: In the Patient/Ward field, type **P** for Patient or **W** for Ward.

Text centered between arrows represents a keyboard key that must be pressed in order for the system to capture a user response or move the cursor to another field. **<Enter>** indicates that the Enter key (or Return key on some keyboards) must be pressed. **<Tab>** indicates that the Tab key must be pressed. Example: Press **<Tab>** to move the cursor to the next field, Type **Y** for Yes or **N** for No, and press **<Enter>**.

 Indicates especially important or helpful information.

 Indicates tips and instructions for using the BCMA GUI options without a mouse. See Section 1.4.5, Using BCMA Without a Mouse, for further information.

1.4.3 Package Conventions

Up-arrows (caret or a circumflex)

^ In the CHUI application of BCMA, the user can move back to previous screens by entering a **^** and pressing **<Enter>**. Repeat this process until the desired screen is reached.

1.4.4 On-line Help

?, ??, ??? On-line help is available by entering one, two, or three question marks at a prompt. One question mark elicits a brief statement of what information is appropriate for the prompt; two question marks elicits more help, plus the hidden actions shown above; and three question marks will provide more detailed help, including a list of possible answers, if appropriate.

1.4.5 Using BMCA Without a Mouse

The GUI application of BCMA can be used without a mouse. Many GUI features (including menu bar options, drop-down menu options, and screen fields) can be accessed and used via the keyboard, if desired. Specific instructions for using BCMA without a mouse are included throughout the manual.

2 SETTING SITE PARAMETERS IN GUI

2.1 Signing on to BCMA Site Parameters

1. Double click on the BCMA parameters icon on your desktop, as shown in Exhibit 1: BCMA Desktop Icon.

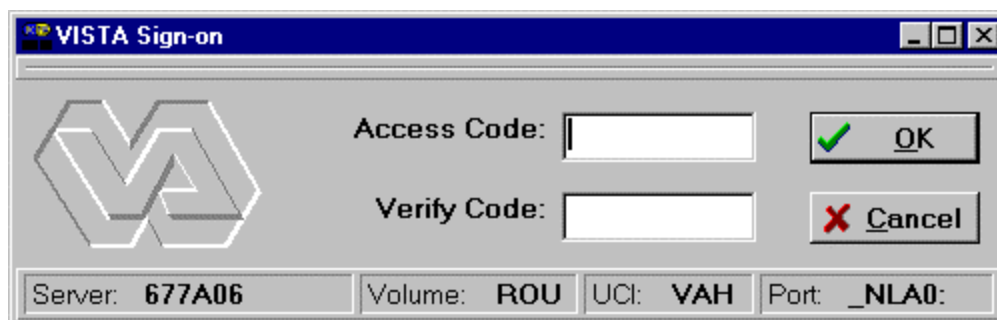
EXHIBIT 1: BCMA DESKTOP ICON



Shortcut to BCMApar.lnk

2. The **VISTA** Sign-on screen will display as shown in Exhibit 2, **VISTA** Sign-on Screen.
- ☞ All site parameters can also be set in the character-based user interface (CHUI) application of BCMA. See Section 3, BCMA CHUI Menu—Manager Option, of this manual for instructions and sample screens.

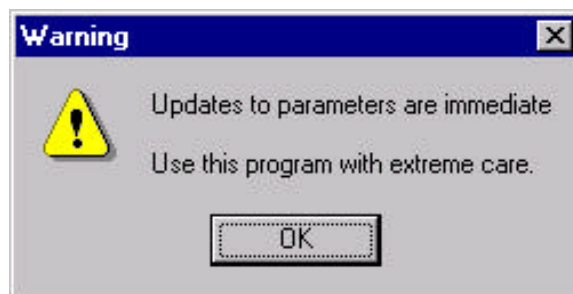
EXHIBIT 2: VISTA SIGN-ON SCREEN



3. The blinking cursor should appear in the Access Code field. If not, click once in the field to move the cursor.
- ☞ To use the sign-on screen without a mouse, press <Tab> to move the cursor. After entering access and verify codes, press <Tab> to move to the OK button. Press <Enter>.
4. Type your access code, and press <Tab>.
 5. The blinking cursor should appear in the Verify Code field. If not click once in the field to move the cursor.
 6. Type your verify code, and press <Enter>.
- ☞ For a short cut, in the Access Code field, type both the Access Code and the Verify Code separated by a semi-colon. Example: accesscode;verifycode.

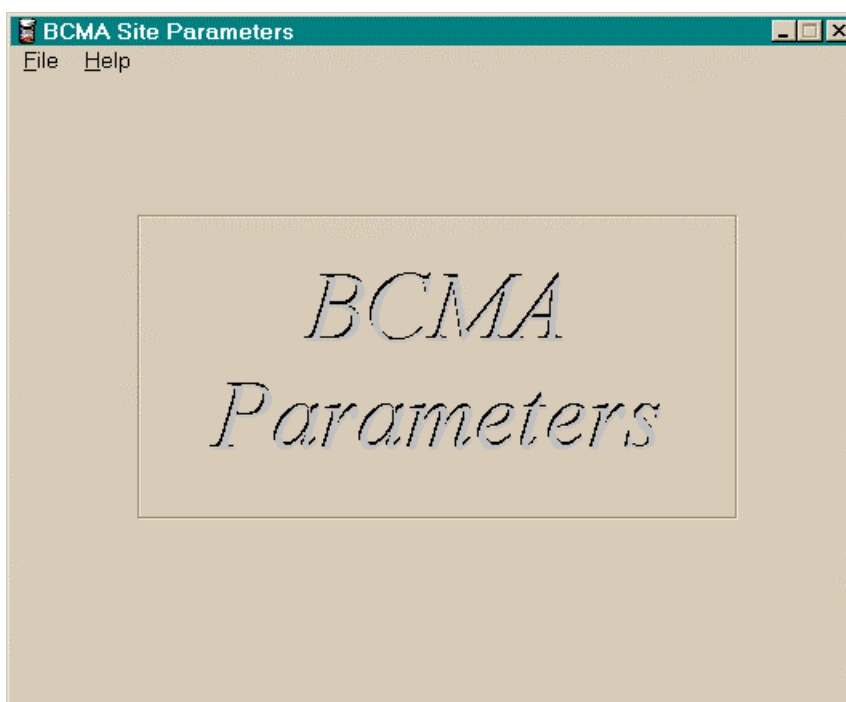
7. A warning message will display as shown in Exhibit 3, Warning Message Window.


EXHIBIT 3: WARNING MESSAGE WINDOW



8. To proceed, click on OK, or press <Enter>.
9. The BCMA parameters initial menu screen will display as shown in Exhibit 4, BCMA Site Parameters Opening Screen.

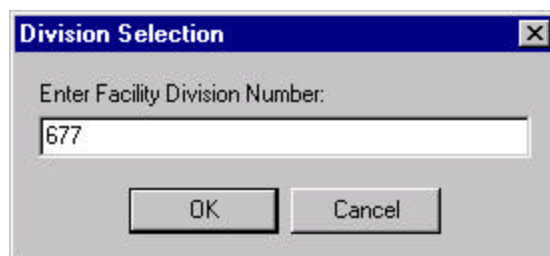
EXHIBIT 4: BCMA SITE PARAMETERS OPENING SCREEN



10. Move the cursor to the **File** option on the menu bar.
 11. Click once. A drop-down menu will display Open, Close, and Exit options.
 12. Click on the Open option.
-  To Open the parameters without using the mouse, press <Alt> and **F**. The Open option will be highlighted. Press <Enter>.

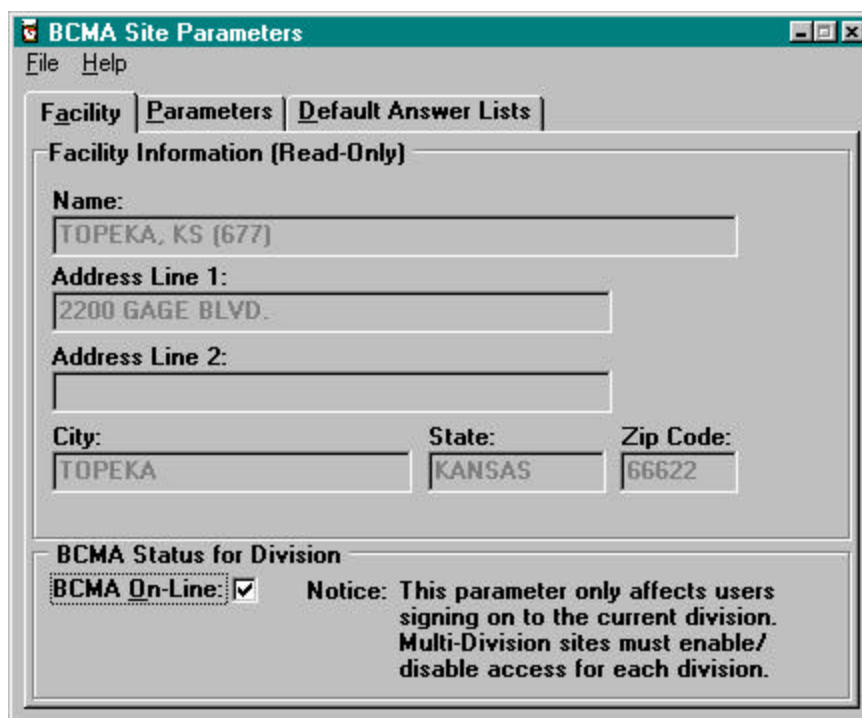
13. If there is more than one division defined for a facility, the Division Selection window will display, as shown in Exhibit 5, Division Selection Screen.

EXHIBIT 5: DIVISION SELECTION SCREEN

A small dialog box titled "Division Selection" with a close button (X) in the top right corner. It contains a label "Enter Facility Division Number:" followed by a text input field containing the number "677". At the bottom, there are two buttons: "OK" and "Cancel".

14. Type the appropriate division number. Click on OK, or press <Enter>. The parameters menu will display as shown in Exhibit 6, BCMA Site Parameters—Facility Tab.

EXHIBIT 6: BCMA SITE PARAMETERS—FACILITY TAB

A screenshot of the "BCMA Site Parameters" window with the "Facility" tab selected. The window has a menu bar with "File" and "Help". The "Facility Information (Read-Only)" section contains the following fields: "Name:" with value "TOPEKA, KS (677)", "Address Line 1:" with value "2200 GAGE BLVD.", "Address Line 2:" (empty), "City:" with value "TOPEKA", "State:" with value "KANSAS", and "Zip Code:" with value "66622". The "BCMA Status for Division" section contains a checkbox labeled "BCMA On-Line:" which is checked. To the right of the checkbox is a notice: "Notice: This parameter only affects users signing on to the current division. Multi-Division sites must enable/disable access for each division."

The BCMA Parameters window presents three tabs for site parameter information—Facility, Parameters, and Default Answers Lists.

2.2 Facility Tab

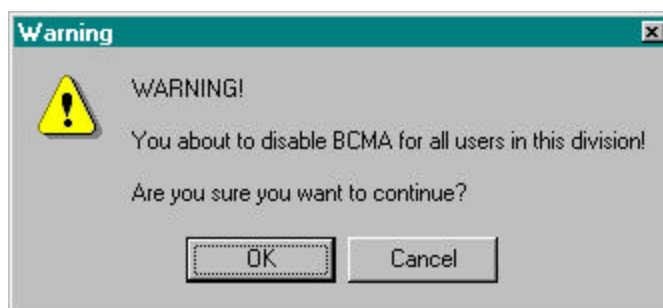
☛ The information displayed on the Facility tab is read-only. These fields are populated by the INSTITUTION file (#4).

By clicking in the BCMA On-Line check box on the Facility tab, IRM personnel can enable or disable users from starting a new GUI session. However, users who are already signed on to GUI will not be affected. CHUI options and the GUI Site Parameters option are not affected by this parameter. If the BCMA On-Line box is checked, BCMA is on-line and all CHUI and GUI options are available. To remove the check mark, click on the box.

 To remove the mark from the BCMA On-Line check box without using a mouse, press <Alt> and O.

The warning illustrated by Exhibit 7, BCMA On-Line Warning, will display. To remove the check mark from the box, click on the OK button, or press <Enter>. Clicking on the Cancel button will keep the mark in the check box and return the user to the Facility tab.

EXHIBIT 7: BCMA ON-LINE WARNING



2.3 Parameters Tab

Click on the Parameters tab to display the parameters fields, as shown in Exhibit 8, BCMA Site Parameters—Parameters Tab.

EXHIBIT 8: BCMA SITE PARAMETERS—PARAMETERS TAB

BCMA Site Parameters

File Help

Facility Parameters Default Answer Lists

Output Devices

Scratch HFS Directory:
DSAO:HFS

Missing Dose Request Printer:
IRMTRAINING\$PRT (12P)

Administration

☐ Require ESig to Administer Medication

Allowable Time Limits (In Minutes)

Before Scheduled Admin Time	After Scheduled Admin Time	PRN Effective-ness entry
60	60	240

30 Max Client/Server Clock Variance

Mail Groups

General System Error:
BCMA IRM ERRORS

Due List Error:
CMA ADMIN TIME ERROR

Missing Dose Notification:
BCMA MISSING DOSE

Virtual Due List Setup

Default Times From Now

Start Time: 1 hour prior Stop Time: 1 hour after

Include Schedule Types

☒ Continuous ☐ One-Time
☐ PRN ☐ On-Call

To display the Parameters tab without using the mouse, press <Alt> and **P**. To move the cursor from field to field in the tab, press <Tab> until the desired field is selected

To define site parameters, perform the following steps:

1. In the Scratch HFS Directory field, enter the designated Scratch Host File Server (HFS) directory. This is not a required field. If the user chooses not to specify a directory, the system will default to the working Broker Server directory.
2. In the Missing Dose Request Printer field, enter the default division printer for missing doses. The Kernel Parameters Tool Kit contains parameters specific to ward locations and users for the BCMA software. The parameters are identified in the Installation Guide and in the Technical Security Manual.
3. In the Mail Groups fields, enter the mail groups created using the **VISTA** Mail Group Edit Option. Only predefined mail groups can be entered in the Parameters Tab Mail Groups fields. These are not required fields and there are no defaults. If no mail group is entered, a mail message is not generated. The Mail Groups box contains the following definable fields:
 - **General Systems Error.** This mail group should include all Information Resource Management (IRM) staff acting in a BCMA support capacity.
 - **Due List Error.** If a mail group is defined here, an e-mail message will be generated for incomplete medication orders. For instance, if an order is sent without the required admin time, BCMA will generate an e-mail message and send it to the members of the Due List Error mail group.

- **Missing Dose Notification.** If this mail group is identified, an e-mail message will be generated for any missing dose entered through the CHUI or GUI menu options. The mail message will be sent to all members of the mail group. This mail group alerts Pharmacy even if the designated Missing Dose printer is not functioning.
4. If both Access/Verify Codes and Electronic Signatures are required before users can enter the GUI software, click on the Require ESig To Administer Medication check box.



To turn the ESig check box on and off without a mouse, press <Tab> until the Require ESig to Administer Medication field is selected, and press the keyboard space bar.

5. To set the Allowable Time Limits (In Minutes) for medication administration, click on the down-arrow next to each window. Select a time from the drop-down menu, and press <Enter>. Allowable Time Limits Before and After Scheduled Admin Times are definable on a divisional basis to meet administration requirements for each medical center. In the example shown in Exhibit 8, BCMA Site Parameters—Parameters Tab, the allowable window is set to one hour before through one hour after the scheduled administration time. Each window may be defined up to 240 minutes.



The Allowable Time Limits, Max Client/Server Clock Variance, and Virtual Due List times fields can be accessed and edited without using the mouse. Press <Tab> until the desired field is selected. Press <Alt> and the down arrow on the keyboard. A drop-down menu will display. Use the up and down arrows on the keyboard to select the desired option, and press <Enter>.

- ☛ If a Continuous dose is administered outside the allowable time limits, a variance will be recorded.

6. To set the Allowable Time for PRN Effectiveness, click on the down-arrow next to the window. Select a time from the drop-down menu, and press <Enter>. This is a divisional site parameter and defines the allowable time for PRN effectiveness to be assessed after the PRN was given. This window may be set up to 240 minutes.

- ☛ If a PRN Effectiveness comment is entered after the allowable amount of time, a variance will be recorded.

7. To set the Max Client/Server Clock Variance, enter the maximum number of minutes allowed for variance between the server clock and the PC clock. If the maximum number of minutes is exceeded, a warning message will display.
8. To set the Virtual Due List Setup default times, click on the down-arrow under Start Time and Stop Time. Select a time from the drop-down menu, and press <Enter>.
9. Click in the desired Include Schedule Types check boxes to determine the default display for the Virtual Due List. Multiple choices, a single choice, or no choice can be selected.



To turn the Schedule Types check boxes on and off, press <Tab> until the desired Schedule Type is selected, and press the keyboard space bar.

✎ The parameters set using steps 8 and 9 are the initial default parameters. However, if a user changes the Start Time, Stop Time, or Order Types in the GUI Virtual Due List (VDL), the system will “remember” the user’s new parameters and will present them the next time that same user logs on. A user with the PSB MANAGER security key can use the Reset User Parameters option in the CHUI application to reset the default parameters for an individual user. See Section 3.7, Reset User Parameters, for instructions on using the Manager CHUI option to reset user parameters.

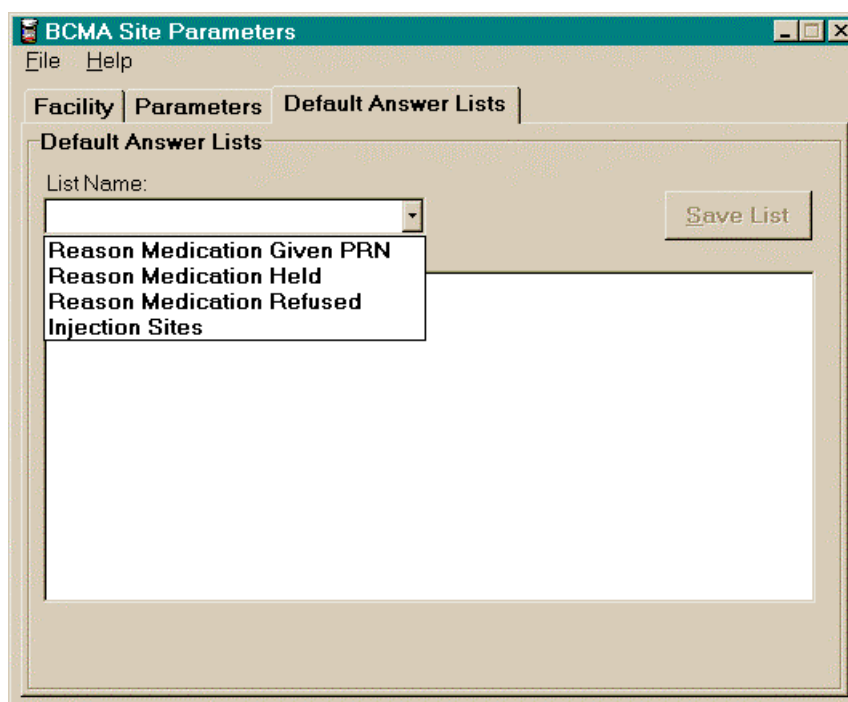
2.4 Default Answer Lists Tab

The Default Answer Lists tab allows the user to enter reasons that can be applied to medications that are Given, Held, and Refused, and identify injection sites. These lists are free text and definable on a divisional basis. To establish a Default Answer List, perform the following steps:

1. Click once on the down arrow in the List Name field. A drop-down menu will display, as shown in Exhibit 9, BCMA Site Parameters—Default Answer Lists Tab.

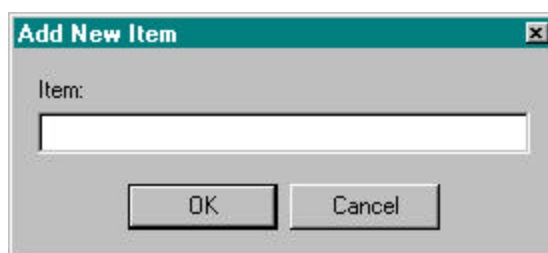
✎ To access the lists in the Default Answer Lists parameters tab without a mouse, press <Tab> until the cursor is flashing in the List Name field. Press <Alt> and the down arrow on the keyboard. When the drop-down menu displays, use the up and down arrows on the keyboard to move to the desired option. Press <Enter>. The selected option will display in the List Name field and a list will display in the text box. Use the up and down arrow keys on the keyboard to move through the list.

EXHIBIT 9: BCMA SITE PARAMETERS—DEFAULT ANSWER LISTS TAB



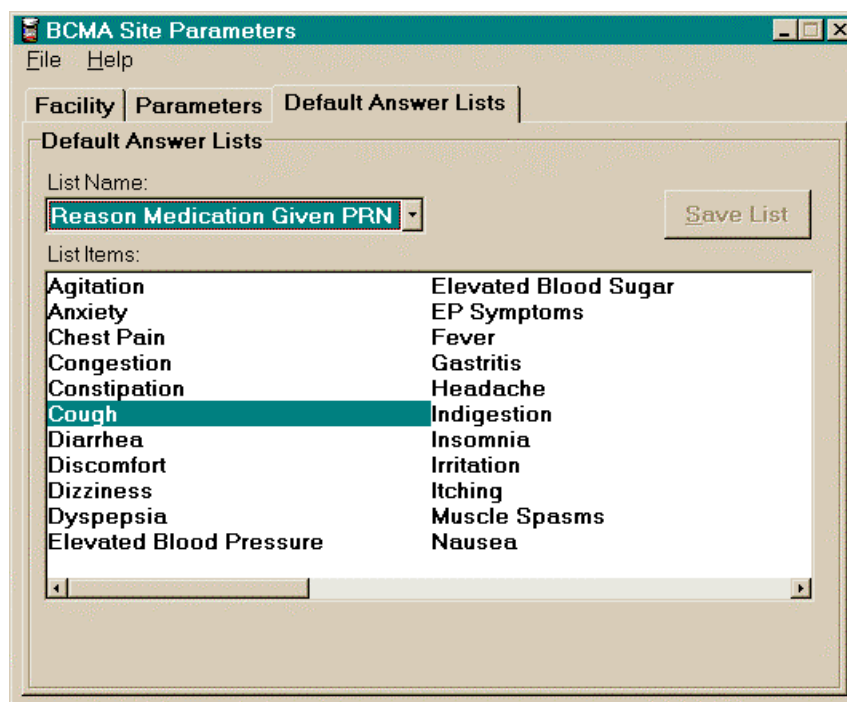
2. Highlight the desired list. The list name will appear in the field. If a list already exists, it will display in the text box.
3. Move the cursor to the text box, and click once on the right mouse button. A short menu will appear, offering the following choices: Add Name, Rename, Delete.
4. Click on Add Name. A window will open, as shown in Exhibit 10, Add New Item Window.

EXHIBIT 10: ADD NEW ITEM WINDOW



5. Enter the new item, and click on the Save List button. The item will appear in the list in alphabetical order, as shown in Exhibit 11, Default Answer Lists Reasons Given Text Box.

EXHIBIT 11: DEFAULT ANSWER LISTS REASONS GIVEN TEXT BOX



- ➡ To change or delete a list item, first highlight the item in the text box, then right-click on the text box. To rename an item, select Rename, and type the new name in the Rename Item field. To delete an item, select Delete. After either action, click on the Save List Button.
- 🖱 The List Items cannot be changed without a mouse. For instructions on changing default lists in the CHUI application, see Section 3.3.2, Reviewing and Editing Default Lists.

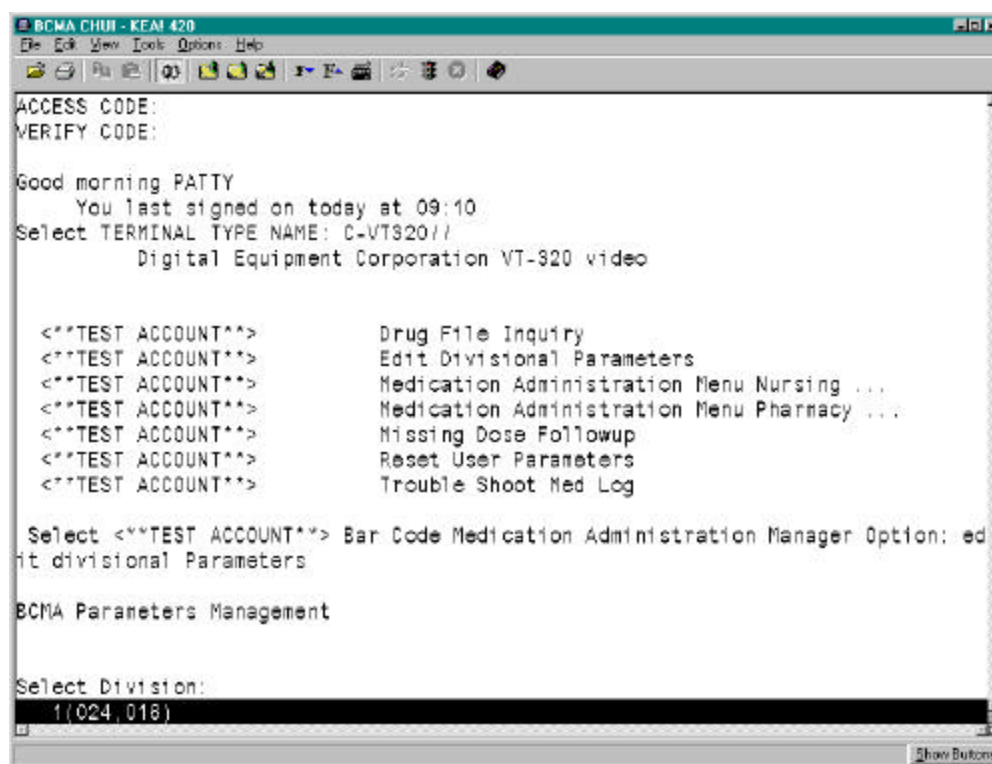
3 BCMA CHUI MENU—MANAGER OPTION

3.1 Using The Bar Code Medication Administration Manager Option Menu

The BCMA Manager Menu in CHUI allows users with the PSB MANAGER security key to access information that has been entered via the graphical user interface (GUI) Virtual Due List (VDL). Because BCMA operates in real time, scanned information is available as soon as the scan is successfully completed. The menu as shown in Exhibit 12, BCMA CHUI Menu—Manager Option, may be accessed from any **VISTA**-enabled terminal within the medical center.

- ☞ The PSB MANAGER menu should be assigned to the package coordinators for Bar Code Med Admin. The PSB MANAGER security key locks this menu.

EXHIBIT 12: BCMA CHUI MENU—MANAGER OPTION



To select any of the options, perform the following steps:

1. The cursor will be flashing in the Select Bar Code Medication Administration Manager Option field at the bottom of the screen.
2. Enter the number of the desired option.
3. Press <Enter> to display the screen for the option chosen.

3.2 Drug File Inquiry

The Drug File Inquiry allows the user to check the bar coded IEN numbers listed on unit dose drugs. If the incorrect bar code is affixed, the Drug File Inquiry will help the user resolve the discrepancy.

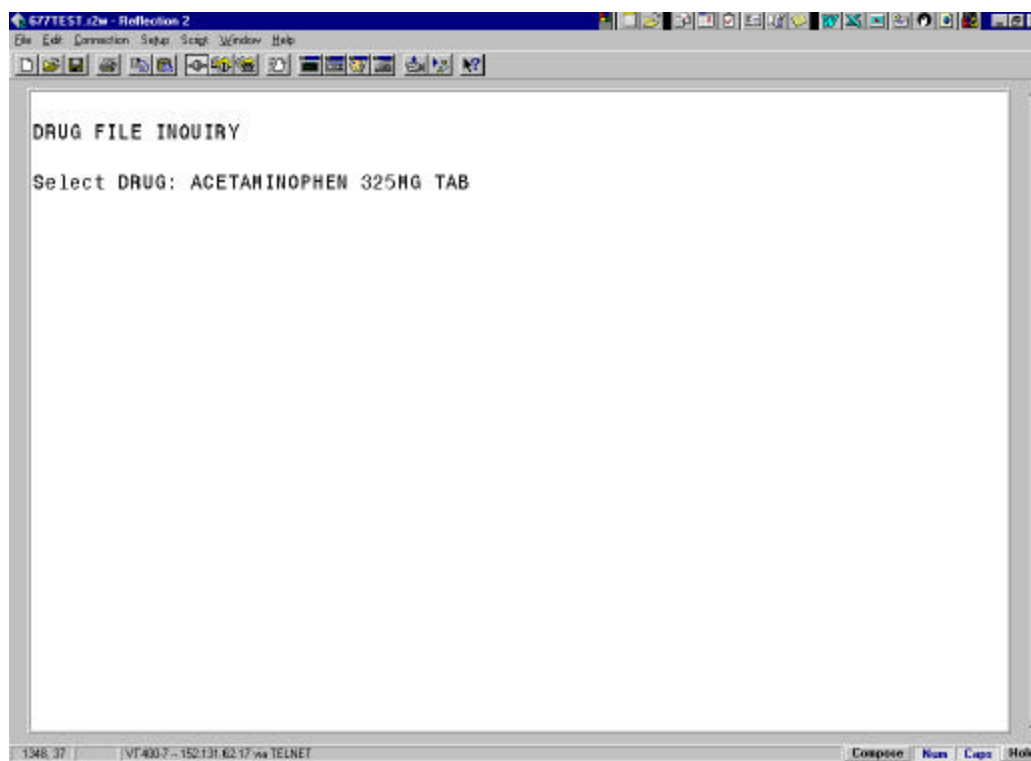
➡ See Section 3.1, Using the Bar Code Medication Administration Manager Option Menu, for instructions on selecting manager options, including Drug File Inquiry.

To run a Drug File Inquiry, perform the following steps:

1. In the Select Drug field, as shown in Exhibit 13, Drug File Inquiry Screen 1, type the name and dosage of the drug, and press <Enter>.

➡ To display a list of standard formats for listing a medication, enter ? in the Select Drug field, and press <Enter>.

EXHIBIT 13: DRUG FILE INQUIRY SCREEN 1



2. The Drug File information will display, as illustrated in Exhibit 14, Drug File Inquiry Screen 2.

EXHIBIT 14: DRUG FILE INQUIRY SCREEN 2

```
677TEST.r2w - Reflection 2
File Edit Connection Setup Script Window Help

DRUG NAME: ACETAMINOPHEN 325MG TAB (IEN: 263)
-----
PRICE PER DISPENSE UNIT:      0.004
NATIONAL DRUG CLASS:         CN103
NON-FORMULARY:
QUANTITY DISPENSE MESSAGE:   DISPENSE IN MULTIPLES OF 100
CMOP DISPENSE:               YES
MESSAGE:                      90 DAY FILL *ATC A/B*

SYNONYMS:
      APAP                      TYLENOL
      ACET325                   000677000100
      051111048893

415, 42 VT400-7 -- 152.131.62.17 via TELNET Compose Num Caps Hold
```

- ☞ The Internal Entry Number (IEN) appears on the first line, to the right of the Drug Name. This IEN is unique to this drug file entry. In most cases, it is the bar coded number on the unit-dose packages that are created in the pharmacy. Manufacturers National Drug Code (NDC) bar codes may appear in the synonym field of this display. If the drug is non-formulary, the Non-Formulary field will be set to N/F.

3.3 Edit Divisional Parameters

This option is the CHUI method of accessing the BCMA site parameters and default lists. See Section 1, Setting Site Parameters in GUI, of this manual for information on accessing and editing divisional parameters using the GUI application.

☛ See Section 3.1, Using the Bar Code Medication Administration Manager Option Menu, for instructions on selecting manager options, including Edit Divisional Parameters.

3.3.1 Reviewing and Editing Divisional Parameters

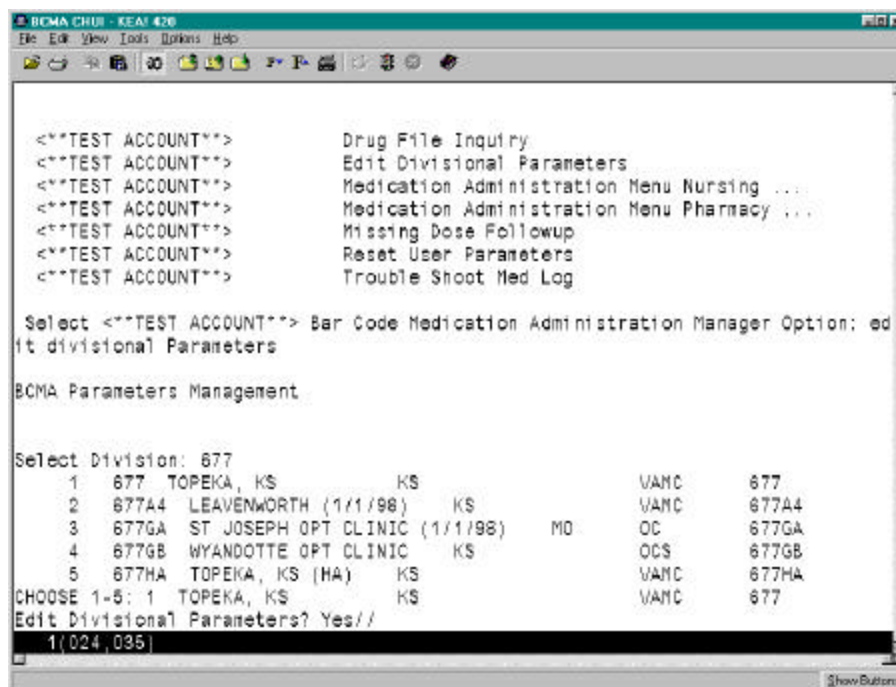
To review and edit divisional parameters, perform the following steps:

1. At the Select Division prompt, enter the division number, and press <Enter>. If the division has more than one facility, the user will be prompted to select a facility. Enter the number corresponding to the desired facility listed on the screen, and press <Enter>.
2. At the Edit Divisional Parameters? YES// prompt, type Y for Yes, or press <Enter>.

☛ To bypass the divisional parameters list and go directly to Edit Default Lists, type N for No at the Edit Divisional Parameters? Yes// prompt. At the screen prompt Edit Default Lists? Yes//, type Y and press <Enter>. Refer to Section 3.3.2, Reviewing and Editing Default Lists, of this manual for further information and sample screens.

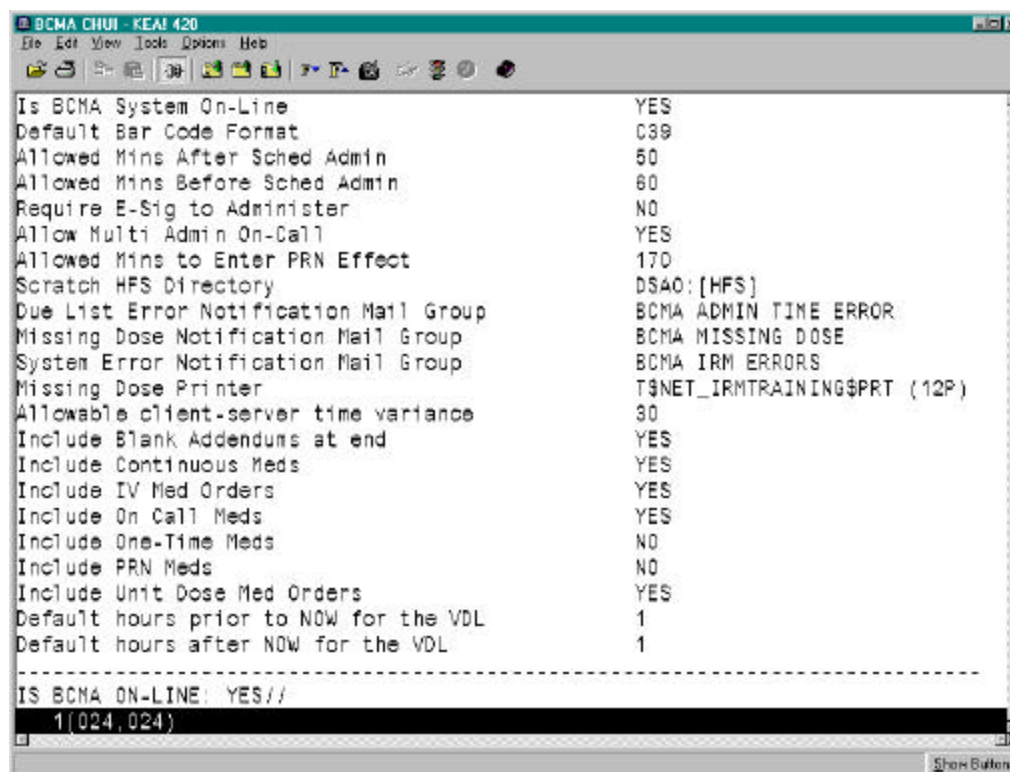
Exhibit 15, Edit Divisional Parameters Screen, shows the Select Division sequence and the screen prompts described above.

EXHIBIT 15: EDIT DIVISIONAL PARAMETERS SCREEN



A list of current parameters and defaults will be presented, as shown in Exhibit 16, Current Divisional Parameters Listing Screen. The user will be prompted to accept or change each item on the list. The prompts are at the bottom of the screen. To accept the current parameter, press <Enter> at the prompt. To change a parameter, enter the new value, and press <Enter>.

EXHIBIT 16: CURRENT DIVISIONAL PARAMETERS LISTING SCREEN



Following is an explanation of the parameters:

- **Is BCMA System On-Line:** This is an overall system switch that turns access to the software on and off by division.
- **Default Bar Code Format:** This parameter specifies the BCMA bar code label print option that uses the Zebra 105SE printer.
- **Allowed Mins After Sched Time:** This shows the number of minutes prior to a scheduled administration that are allowed without recording a variance.
- **Allowed Mins Before Sched Time:** This shows the number of minutes after a scheduled administration that is allowed without recording a variance.
- **Require E-Sig To Administer:** If this is set to Yes, the system will prompt users for their electronic signature code before allowing access to the client software.
- **Allow Multi Admin On-Call:** This parameter allows multiple administrations to be passed for a single On-Call order.
- **Allowed Mins to Enter PRN Effect:** This shows the number of minutes after an administration that a PRN Effectiveness is to be entered before a variance is recorded.

- Scratch HFS Directory: This parameter should point to a scratch directory that all users have access to. This is an optional parameter. If this parameter is not specified, the directory will default to the working BrokerServer
- Due List Error Notification Mail Group: This designates the mail group to be notified when an erroneous order is found while printing or displaying the VDL.
- Missing Dose Notification Mail Group: This designates the mail group to be notified of a missing dose for this division.
- System Error Notification Mail Group: This designates the mail group to be notified of unresolvable errors within the BCMA system.
- Missing Dose Printer: This shows the printer that Missing Dose Requests will be sent to.
- Allowable client-server time variance: This shows the allowable variance in minutes between the server clock and the client clock. If the time varies more than this amount, the user will receive a screen notice.
- Include Blank Addendums at end: This Yes/No field shows whether blank addendum sheets should be printed with the Due List.
- Include Continuous Meds: This Yes/No field shows whether Continuous medications should be included on the Due List.
- Include IV Med Orders: This Yes/No field shows whether IV medications should be included on the Due List.
- Include On Call Meds: This Yes/No field shows whether On Call medications should be included on the Due List.
- Include One-Time Meds: This Yes/No field shows whether One-Time medications should be included on the Due List.
- Include PRN Meds: This Yes/No field shows whether PRN medications should be included on the Due List.
- Include Unit Dose Med Orders: This Yes/No field shows whether unit dose medications should be included on the Due List.
- Default hours prior to NOW for the VDL: This shows the number of hours prior to the present time for the initial VDL display.
- Default hours after NOW for the VDL: This shows the number of hours after the present time for the initial VDL display.

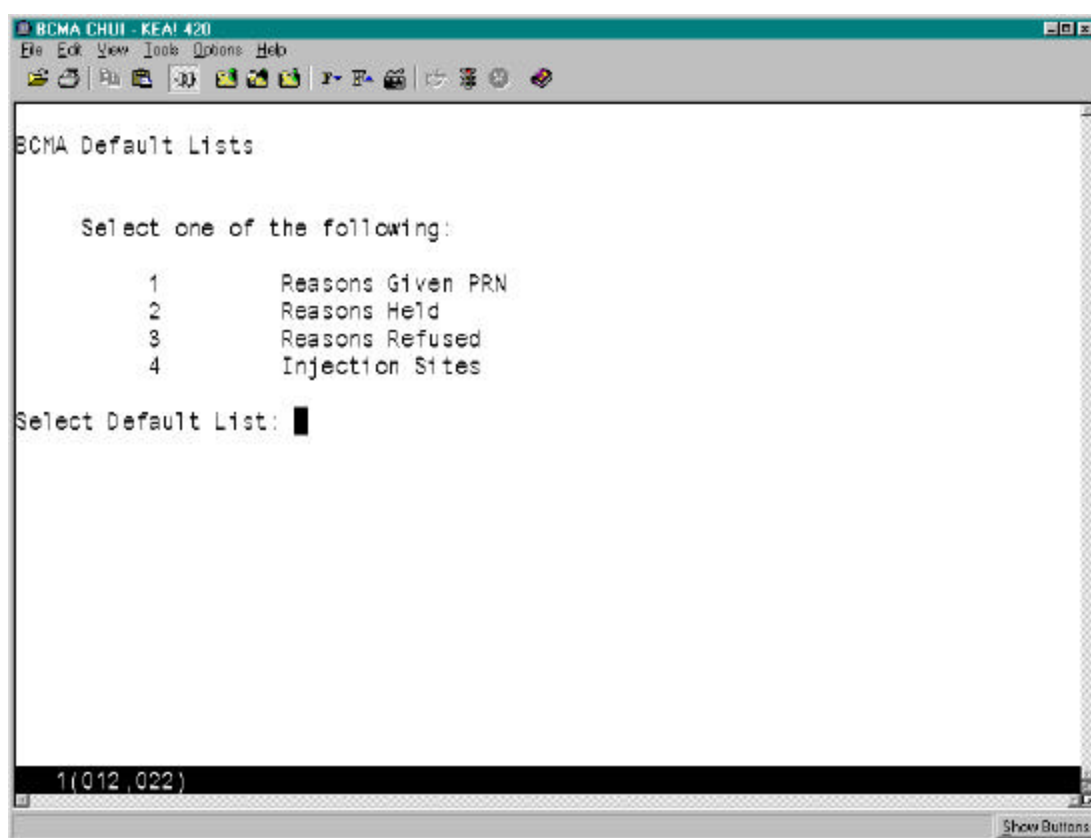
The user is then given the opportunity to review any changes made to the Divisional Site Parameters that are again automatically displayed on the screen.

3.3.2 Reviewing and Editing Default Lists

The user can edit the defaults governing injection sites and reasons a medication is given PRN or is Held or Refused. Users can also access these default lists on the VDL in the GUI application. For more information, see Section 2.4, Default Answer Lists Tab, of this manual

After the user has reviewed the parameters listed in Section 3.3.1, Reviewing and Editing Divisional Parameters, the Edit Default Lists? Yes// prompt will appear. To review and edit default lists, enter **Y** for Yes, or press **<Enter>**. A screen will display the default lists, as shown in Exhibit 17, BCMA Default Lists Screen.

EXHIBIT 17: BCMA DEFAULT LISTS SCREEN



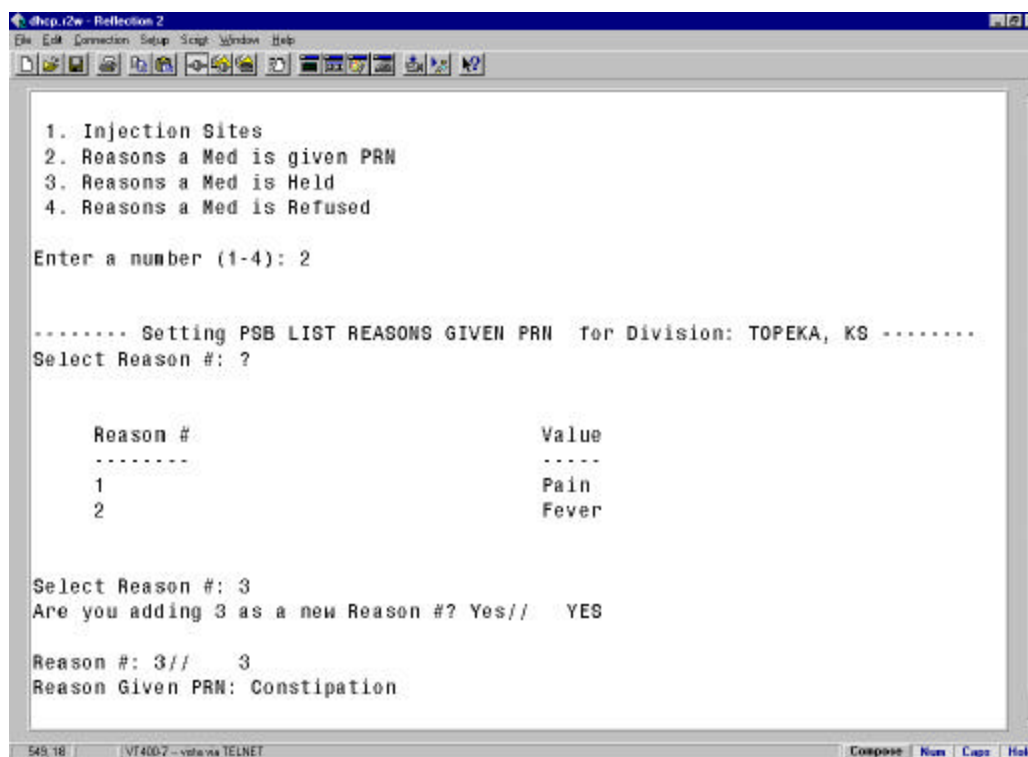
All of the default lists function in the same way. To view and edit any default list, perform the following steps:

1. In the Select Default List field, enter the number corresponding to the desired list, and press **<Enter>**.
2. The screen will list the items that are allowed on that default list. Enter the number corresponding to the list item to be edited, and press **<Enter>**.
3. The next prompt shows the number selected. Press **<Enter>** to confirm the selection.
4. The next prompt gives the text description of the list item.
 - To confirm the item, press **<Enter>**. At the Enter RETURN to continue or '^' to exit prompt, Press **<Enter>** to return to the BCMA Default Lists screen.

- To change the selected item, enter the new description after the //, and press <Enter>. At the next prompt, enter the same item number, and press <Enter>. The next prompt is to confirm the number. Press <Enter>. The next prompt will display the new description. Press <Enter> to confirm.

Exhibit 18, Reasons a Med is Given PRN Edit Screen, illustrates part of the default list edit sequence.

EXHIBIT 18: REASONS A MED IS GIVEN PRN EDIT SCREEN

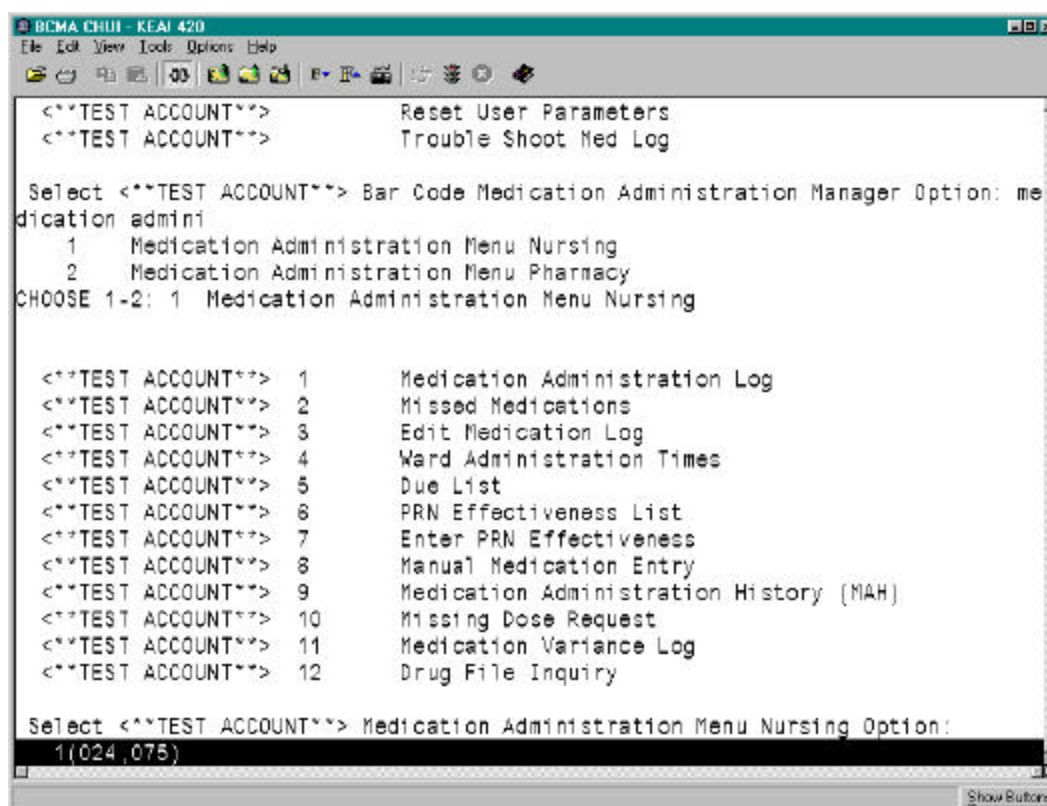


3.4 Medication Administration Nursing Menu

The Bar Code Med Admin (BCMA) Nursing Option Menu allows Nursing personnel to access information that has been entered via the graphical user interface (GUI,) Virtual Due List (VDL). Because BCMA operates in real time, scanned information is available as soon as the scan is successfully completed. The Nursing menu as shown in Exhibit 19, BCMA Nursing Option Menu, may be accessed from any **VISTA**-enabled terminal within the medical center.

- Several of these options are available under both the Nursing and Pharmacy menu options. The options that are unique to Nursing include Edit medication Log, Ward Administration Times, PRN Effectiveness List, Enter PRN Effectiveness, Manual Medication Entry, and Medication Variance Log.

EXHIBIT 19: BCMA NURSING OPTION MENU



To select any of the options, perform the following steps:

4. Move your cursor to the Select Medication Administration Menu Nursing Option field at the bottom of the screen.
5. Enter the number of the desired option.
6. Press **<Enter>** to display the sort screen for the option chosen.

3.4.1 Using ScreenMan Format to Request a Report

Many of the Nursing options use a common screen to define selection criteria for reports, as illustrated by Exhibit 20, Report Request Using ScreenMan Format. Other options use specific screens. This section explains the screen fields for all reports using the ScreenMan format and gives instructions for entering information. Following this section are sample reports that can be run from each of the Medication Administration Menu Nursing options.

EXHIBIT 20: REPORT REQUEST USING SCREENMAN FORMAT

Request #: NL-19990401-134430 Medication Log

Start Date: MAR 31,1999 At: 0:01a Stop Date: MAR 31,1999 At: 1:00p

Run by Patient or Ward: Patient
 Patient Name: KZTAAR,*TEST*KEITH D
 Ward Location: Sort by Pt or Room-Bed:

Include Comments:
 Include Audits:

Print to DEVICE: T\$NET_B1A13\$PRINTER (1
 Queue To Run At: APR 1,1999@13:44

Instructions: PF1-E Submit PF1-Q Cancel PF1-R Refresh <Ret> Re-Edit:

KZTAAR,*TEST*KEITH D	01-09-58	408029575	NO	NSC VETERAN
----------------------	----------	-----------	----	-------------

Consolidate ALL Appts

COMMAND: Press <PF1>H for help **Insert**

Many of the reports can be sorted and printed in the following ways:


- By patient. The information will display chronologically.
- By ward. The information can be sorted by patient or room/bed, and it will display chronologically within each patient.

1. In the Start Date field, type in the start date of the report, and press **<Enter>**. (The cursor will move to the next field each time **<Enter>** is pressed.)


☛ To display a list of standard date and time formats, enter **?** in any date or time field, and press **<Enter>**.

2. In the first At field, type the start time of the report (in HHMM format), and press **<Enter>**.
3. In the Stop Date field, type in the stop date, and press **<Enter>**.
4. In the second At field, type the stop time (in HHMM format), and press **<Enter>**.
5. In the Run by Patient or Ward field, type **P** for Patient or **W** for Ward, and press **<Enter>**.

- (If the report is being sorted by ward) In the Ward Location field, type in the ward designation, and press **<Enter>**. In the Sort by Pt or Room-Bed field, type **P** for Patient or **R** for Room, and press **<Enter>**.
- (If sorting by patient) In the Patient Name field, type the patient's name, and press **<Enter>**.

 To display a list of standard name formats, enter **?** in any Patient Name field, and press **<Enter>**.

8. In the Include Comments field, enter **Y** for Yes or **N** for No, and press **<Enter>**.


 If a Yes/No field is blank, just press **<Enter>** to respond No.

9. In the Include Audits field, enter **Y** for Yes or **N** for No, and press **<Enter>**.

10. In the Print to Device field, type in a valid printer, and press **<Enter>**.

11. In the Queue to Run At field, press **<Enter>** to accept the date displayed, or enter a date and time and, press **<Enter>**. The report will print at the time and date entered.

12. At the **<RET>** Re-Edit prompt, press **PF1** (or Num Lock) followed by **E** to submit this report for printing. Other available actions at this prompt are **PF1-Q** to Quit or **PF1-R** to Refresh the screen.

 Depending on how the user's facility is configured, either the PF1 key or Num Lock will be active. For consistency, this manual refers to the PF1 convention, but users are advised that PF1 is the same as Num Lock, if that is the active function at their sites.

13. The screen will now clear and the following message will appear: Submitting your report request to Taskman... Submitted! Your Task Number is: ###.

3.4.2 Medication Administration Log

The Medication Administration Log displays detailed administration information. The report can be sorted and printed by patient or ward, and the user can specify the date and time range that the report covers.

See Section 3.4.1, Using ScreenMan Format to Request a Report, for instructions on requesting a Med Log Report.

The Medication Administration Log reports will print in a 132-column output. Exhibit 21, Med Log by Patient Report, and Exhibit 22, Med Log by Ward Report, show examples of both Medication Administration Log reports.

Throughout this manual, the reports shown are provided for illustrative purposes only. Actual reports may be longer.

EXHIBIT 21: MED LOG BY PATIENT REPORT

=====

MEDICATION LOG for Apr 14, 1999@00:01 thru Apr 14, 1999@13:00

LOG TYPE: INDIVIDUAL PATIENT

Run Date: JUN 10, 1999@09:29

Page: 1

Patient: KZTAAR,*TEST*KEITH D

SSN: 408-02-9578

DOB: JAN 2,1941 (58)

Sex: MALE

Ht/Wt: */*

Ward: BCMA Rm A427-02

Dx: PNEUMONIA

Last Mvmt: APR 8,1999@14:07:51

Type: SPECIALTY TRANSFER

Reactions: STRAWBERRIES

=====

Activity Date	Orderable Item [Dose/Sched/Route/Inj Site]	Admin By	Admin Date/Time	Drug/Solution/Additive	U/Ord	U/Gvn Unit
04/14/99 09:00	ARTIFICIAL TEARS [2 GTTS 0600-0800-1000-1200-1400-1600-18 00-2000-2200 OPH]	N2	04/14/99 14:00	ARTIFICIAL TEARS /ML	1.00	1.00 2 DROPS
	Comments: 04/14/99 14:00 N2 I DIDN'T GIVE IT					
	04/14/99 14:03 N2 I GAVE IT TWICE					
04/14/99 09:04	CEFTAZIDIME [INFUSE OVER 30 MIN. Q12H IV Inj Site: Arm, Left Upper]	N2	04/14/99 09:04	CEFTAZIDIME - 1 GM DEXTROSE 5%/WATER - 50 ML		
	Comments: <No Comments>					
04/14/99 09:08	ASCORBIC ACID [500MG MO-WE-FR@0900-1700 PO]	N2	04/14/99 09:08	ASCORBIC ACID 500MG TAB	1.00	2.00 CAP
	Comments: 04/14/99 14:06 N2 NEW ORDER TO DOUBLE THE DOSE TODAY					
04/14/99 09:55	MULTIVITAMINS [1TABLET QD PO]	N2	04/14/99 09:57	MULTIVITAMIN TAB	1.00	1.00 TAB
	Comments: 04/14/99 09:55 N2 Patient Refused					
	04/14/99 09:57 N2 Patient Refused					
	04/14/99 14:04 N2 THIS ISN'T WORKING???					
04/14/99 09:59	IPRATROPIUM [2 PUFFS Q6H INHL]	N2	04/14/99 09:59	IPRATROPIUM BROMIDE INHALER	1.00	1.00 2 PUFFS
	Comments: 04/14/99 09:59 N2 PT GOING TO X-RAY					
04/14/99 09:59	POTASSIUM CHLORIDE [75 ml/hr IV Inj Site: Arm, Right Upper]	N2	04/14/99 09:59	POTASSIUM CHLORIDE - 20 MEQ DEXTROSE 5%/WATER - 1000 ML		
	Comments: <No Comments>					

=====

KZTAAR,*TEST*KEITH D

408-02-9578

Ward: BCMA Room-Bed: A427-02

EXHIBIT 22: MED LOG BY WARD REPORT

```

=====
Continuing/PRN/Stat/One Time Medication/Treatment Record (Detailed Log) (VAF 10-2970 B, C, D)
Run Date: JUL 26, 1999@10:23
LOG TYPE: WARD
Page: 1

Ward Location: BCMA
Division: TOPEKA, KS
=====
Activity Date      Orderable Item      Admin Admin      Drug/Solution/Additive      U/Ord  U/Gvn Unit
                [Dose/Sched/Route/Inj Site]  By   Date/Time
-----
ARIZONA,BCPATIENT (509680003)
Ward: BCMA Rm-Bed: 401-09
-----
04/14/99 09:04  CEFTAZIDIME [INFUSE OVER 30
                MIN. Q12H IV Inj Site: Arm,
                Left Upper]      N3     04/14/99 09:04  CEFTAZIDIME - 1 GM
                DEXTROSE 5%/WATER - 50 ML
-----
04/14/99 09:05  POTASSIUM CHLORIDE [75 ml/hr
                IV Inj Site: Arm, Left Upper]  N3     04/14/99 09:05  POTASSIUM CHLORIDE - 20 MEQ
                DEXTROSE 5%/WATER - 1000 ML
-----
04/14/99 14:48  MOISTURIZING LOTION [ PRN TOP]      N3     04/14/99 14:48  DRY SKIN LOTION/ML      1.00    0.00
                PRN Reason: C/O ITCHING
                PRN Effectiveness: NO RELIEF
                Entered By: STUDENT,NURSE THREE Date/Time: APR 14, 1999@14:49:39 Minutes: 1
-----
04/14/99 14:57  ACETAMINOPHEN [325-650MG Q4H      N3     04/14/99 12:00  ACETAMINOPHEN 325MG TAB      2.00    3.00 TAB
                PRN PO]
                PRN Reason: C/O H/A
                PRN Effectiveness: RELEIF
                Entered By: STUDENT,NURSE THREE Date/Time: APR 14, 1999@14:59:01 Minutes: 179
-----
ARKANSAS,BCPATIENT (509680004)
Ward: BCMA Rm-Bed: A415-01
-----
04/14/99 09:00  ARTIFICIAL TEARS [2 DROPS
                0600-0800-1000-1200-1400-1600-18
                00-2000-2200 OPH]      N4     04/14/99 09:00  ARTIFICIAL TEARS /ML      1.00    1.00 2 DROPS
-----
04/14/99 09:04  CEFTAZIDIME [INFUSE OVER 30
                MIN. Q12H IV Inj Site: Arm,
                Right Upper]      N4     04/14/99 09:04  CEFTAZIDIME - 1 GM
                DEXTROSE 5%/WATER - 50 ML
-----
04/14/99 09:06  ASCORBIC ACID [500MG
                MO-WE-FR@0900-1700 PO]      N4     04/14/99 09:06  ASCORBIC ACID 500MG TAB      1.00    1.00 TAB
-----

```

3.4.3 Missed Medications

Medications that were not scanned as administered during an administration time window appear on the Missed Medications report. The report includes missed medication, dosage, and scheduled time. The report can be sorted and printed by ward or patient, and the user can specify the date and time that the report covers.

Information that may appear on this report includes medications that were scheduled to be administered, but were not marked as Given, Held, or Refused. Medications placed on Hold via CPRS or Inpatient Medications V.5.0 will appear on this report with Hold in parentheses.

The Missed Med by Ward report should be run after each scheduled admin time. all entries appearing on this report should be resolved.

See Section 3.4.1, Using ScreenMan Format to Request a Report, for instructions on requesting a Missed Medications Report.

The reports will print in a 132-column output. Exhibit 23, Missed Medications by Patient Report, and Exhibit 24, Missed Medications by Ward Report, show examples of both Missed Medications reports.

EXHIBIT 23: MISSED MEDICATIONS BY PATIENT REPORT

=====			
MISSED MEDICATIONS from Mar 31, 1999@09:00 thru Mar 31, 1999@13:00			
Run Date: MAR 31, 1999@13:19			
Page: 1			
Patient:	KZTAAR,*TEST*KEITH D	SSN:	408-02-9575
Sex:	MALE	Ht/Wt:	182cm/80kg
Dx:	IDDM	Last Mvmt:	NOV 3,1998@09:28:57
		DOB:	JAN 9,1958 (41)
		Ward:	MICU-T Rm 401-01
		Type:	SPECIALTY TRANSFER
Reactions: NKDA, EGGS, STRAWBERRIES			
=====			
Administration Date/Time		Medication	

Mar 31, 1999@09:00		ALBUTEROL INHALANT	
Mar 31, 1999@09:00		BENZTROPINE TAB	
Mar 31, 1999@09:00		CLOTRIMAZOLE CREAM,TOP	
Mar 31, 1999@09:00		MULTIVITAMINS TAB	
Mar 31, 1999@12:00		POLYVINYL ALCOHOL SOLN,OPH	
Mar 31, 1999@13:00		ALBUTEROL INHALANT	
Mar 31, 1999@13:00		AMOXICILLIN CAP,ORAL	
Mar 31, 1999@13:00		CLOTRIMAZOLE CREAM,TOP	
Mar 31, 1999@13:00		WARFARIN TAB	
=====			
KZTAAR,*TEST*KEITH D		408-02-9575	
401-01		Ward: MICU-T Room-Bed:	

EXHIBIT 24: MISSED MEDICATIONS BY WARD REPORT

MISSED MEDICATIONS from Mar 31, 1999@09:00 thru Mar 31, 1999@13:00			
Run Date: MAR 31, 1999@14:08			
Page: 1			
Ward Location: 3-1CP			
Division: TOPEKA, KS			
Ward Rm-Bed	Patient	Administration Date/Time	Medication
3-1CP-T 31C-31	COSMO,RANDY B (1111)	Mar 31, 1999@09:00	ACETAMINOPHEN TAB
3-1CP-T 31C-31	COSMO,RANDY B (1111)	Mar 31, 1999@09:00	THIORIDAZINE TAB
3-1CP-T 31C-31	COSMO,RANDY B (1111)	Mar 31, 1999@09:00	WARFARIN TAB
3-1CP-T 31C-31	COSMO,RANDY B (1111)	Mar 31, 1999@13:00	ACETAMINOPHEN TAB
3-1CP-T 31C-31	COSMO,RANDY B (1111)	Mar 31, 1999@13:00	DILTIAZEM TAB
3-1CP-T 31C-31	COSMO,RANDY B (1111)	Mar 31, 1999@13:00	THIORIDAZINE TAB
3-1CP-T 31C-44	HTTELMA,*TEST*LUTHER ELISHA (1286)	Mar 31, 1999@09:00	ASPIRIN TAB,EC
3-1CP-T 31C-44	HTTELMA,*TEST*LUTHER ELISHA (1286)	Mar 31, 1999@13:00	ASPIRIN TAB,EC
3-1CP-T 31C-45	TRENRU,*TEST*VEODA M (6931)	Mar 31, 1999@09:00	DOCUSATE CAP,ORAL

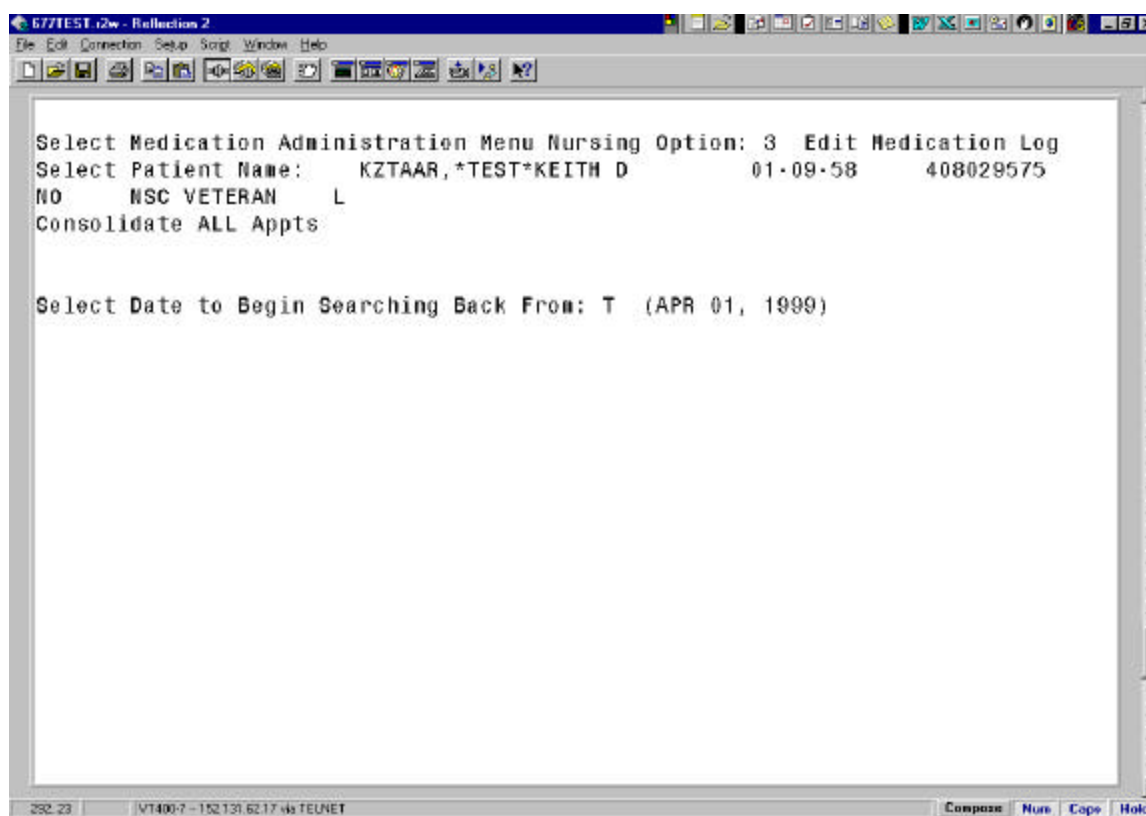
3.4.4 Edit Medication Log

The Edit Medication Log allows users to edit specific medication entries that have been created through the scanning processes. Orders can be edited only by the users who administered them. There is an override feature for users with the PSB MANAGER security key. This allows the key holder to edit any user's medication entry. All edits are audited and appear on the Medication Administration Log report. (See Section 3.4.2, Medication Administration Log for an example of the report.)

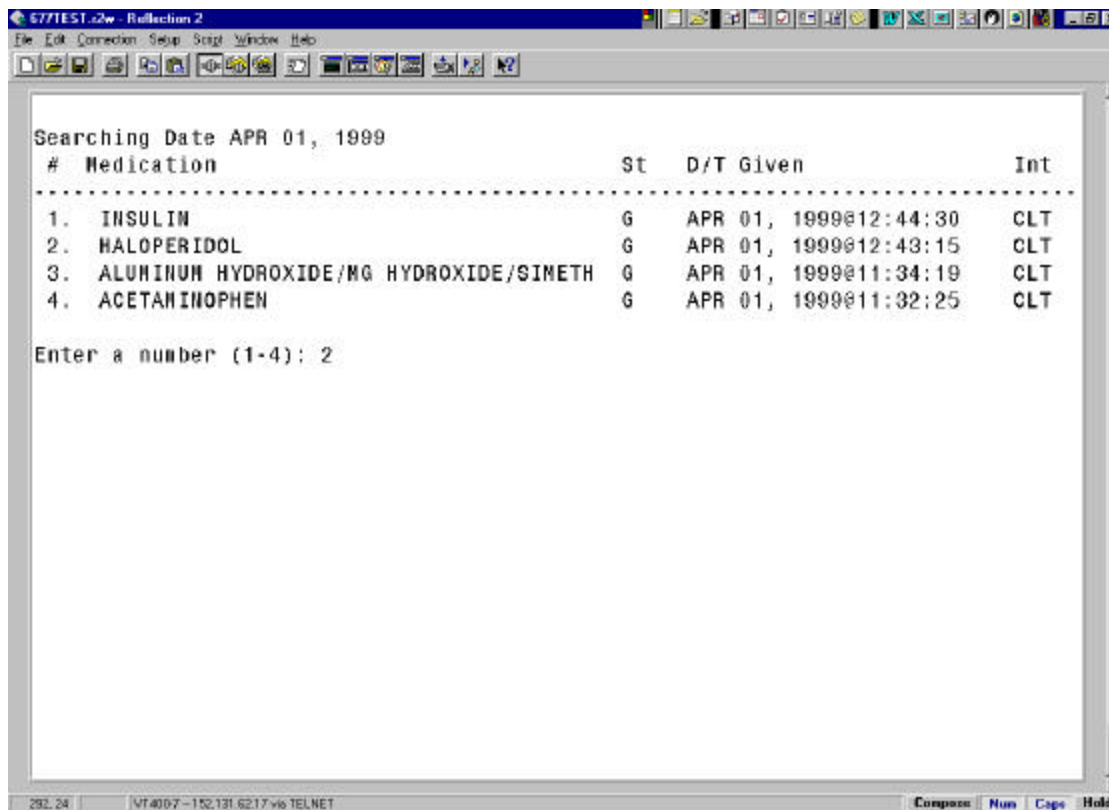
To edit a previously administered medication, perform the following steps:

1. On the screen illustrated in Exhibit 25, Edit Medication Log Screen, enter the patient's name or Social Security Number in the Select Patient Name field, and press **<Enter>**.

EXHIBIT 25: EDIT MEDICATION LOG SCREEN



2. In the Select Date to Begin Searching Back From field, type the desired date, and press **<Enter>**. If a medication was not administered today, a screen message will appear asking if the user would like to move back one day. Press **<Enter>** to move back. This process will continue until the system reaches a date on which medications were administered. At that time, the list of medications will appear, as shown in Exhibit 26, Medication Selection Screen.

EXHIBIT 26: MEDICATION SELECTION SCREEN

☛ The screen will display only the medications administered by the user accessing this option. Entries made by other users will not display unless the user holds the PSB MANAGER security key.

The Medication Selection screen displays the following information:

- The St column displays administration status—G for Given, R for Refused, or H for Held.
 - The D/T Given column displays the administration date/time.
 - The Int column displays the initials of the individual who administered the medication.
4. In the Enter a number (1-4) field, type the number of the medication that to be edited, and press **<Enter>**.

The screen illustrated by Exhibit 27, Administration Edit Screen, will display for the user to change information associated with this order.

EXHIBIT 27: ADMINISTRATION EDIT SCREEN

677TEST.r2w - Reflection 2

File Edit Connection Setup Script Window Help

Medication Log Edit

Patient: KZTAAR,*TEST*KEITH D SSN: 408029575

Medication: PROCAINAMIDE

Admin Status: GIVEN Admin Date/Time: MAR 31,1999@10:18:16

Injection Site:

PRN Reason:

PRN Effectiveness:

Dispense Drugs...

Comment (Required):
PATIENT BECAME DIS-RHYTHMIC 2 HOURS AFTER RECEIVING THIS DOSE

Exit Save Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: E Press <PF1>H for help Insert

895.11 V1400-7-152.131.62.12 via TELNET Compose Num Caps Hold

5. In the Admin Status field, change the status if necessary (Valid entries are G for Given, H for Held, and R for Refused.), and press **<Enter>**.
6. In the Admin Date/Time field, enter the date and time of the actual activity associated with this medication administration event, and press **<Enter>**.
7. In the Injection Site field, enter an injection site (up to 30 characters) or edit an existing entry, and press **<Enter>**.
8. In the PRN Reason field, enter the reason a PRN was administered (up to 30 characters), and press **<Enter>**.

✎ A reason can be entered regardless of medication schedule type. The medication schedule type does not have to be PRN.

9. In the PRN Effectiveness field, enter the effectiveness of a PRN medication or edit the existing entry, and press **<Enter>**.

10. In the Dispense Drugs field, press **<Enter>**. A Dispense Drugs box will display the Dispense Drug(s) associated with this order and the number of units ordered, as shown in Exhibit 28, Dispense Drugs Selection Box.

EXHIBIT 28: DISPENSE DRUGS SELECTION BOX

BCMA CHUI - KEAT 420

File Edit View Tools Options Help

Medication Log Edit

Patient: COSMO, RANDY B SSN: 333221111

Med- Dispense Drugs

Adm	Drug Name	Units Order	Units Given	Units
Inj	ASPIRIN 325MG E.C. TAB	1	1	TAB, EC

PRN

PRN

Dis

Com

COMMAND: 1(008,007) Press <PF1>H for help Insert

Show Buttons

- Change the dispense drug if desired, and press **<Enter>**.
 - A field for Units Given will display. Enter a number between 0 and 999 (up to two decimal digits) and press **<Enter>**.
 - The Units field will display. This is a free-text field used to enter the units. Type in whatever form is being dispensed, such as tab, capsule, liquid, and so on.
 - After the Dispense Drugs information is complete, press **<Enter>** twice.
 - At the COMMAND: Close prompt, press **<Enter>** again.
11. In the Comment (Required) field, type a free-text comment, and press **<Enter>**.
12. In the Command field, type **S** for Save, **E** for Exit, or **R** for Refresh, and press **<Enter>**.
- 🖱️ If **E** is selected, and the data have not been saved, the system will display the following message: Save changes before leaving form (Y/N)?. If the user enters **N**, the data will not be saved. If the user enters **Y**, the changes will be saved.
13. The screen will display the following message: Enter RETURN to continue or '^' to exit.
- To edit another medication entry, press **<Enter>** twice.
 - To return to the main options screen, enter **^**, and press **<Enter>**.

- ☞ When a medication is marked as Held or Refused and the Med Log is edited using the CHUI menu, the Dispense Drug will not appear as the default in the Dispense Drug field; instead, the Dispense Drug field will be blank. When entering the drug name, the user must choose the Dispense Drug from a list. This feature allows users to dispense ward stock and properly document what medication was actually given to complete a med pass. This functionality may be used when the unit dose medications were not available. If the medication that was marked as H (for Held) or R (for Refused) is later administered via the GUI, Dispense Drugs will display in the Dispense Drug field when the Med Log is edited.
- ☞ When using the CHUI option to change the status of a medication to Given, it is the sole responsibility of the user to ensure that the medications are documented correctly, because no scanning has occurred to validate the medication.

3.4.5 Ward Administration Times

The Ward Administration Times report lists current times and medications due depending on the sort criteria established by the user. The report can be sorted and printed in the following ways:

- By patient. Each medication a patient is due at each administration time is listed.
- By ward. The total number of medications due at each administration time is listed for each patient and totaled for the entire ward. This report also shows hourly totals for the ward.

☛ The ward report can be used to help determine workloads on a ward.

See Section 3.4.1 Using ScreenMan Format to Request a Report, for instructions on requesting a Ward Administration Times report.

The printed report is formatted as shown in Exhibit 29, Administration Times by Patient Report, and Exhibit 30, Administration Times by Ward Report.

EXHIBIT 29: ADMINISTRATION TIMES BY PATIENT REPORT

=====				Run Date: JUL 26, 1999@14:32	
PATIENT ADMINISTRATION TIMES				Page: 1	
ADMINISTRATION DATE: JUL 26, 1999					
Patient:	KZTAAR,*TEST*KEITH D	SSN:	408-02-9578	DOB:	JAN 2,1941 (58)
Sex:	MALE	Ht/Wt:	*/*	Ward:	BCMA Rm A427-02
Dx:	PNEUMONIA	Last Mvmt:	APR 8,1999@14:07:51	Type:	SPECIALTY TRANSFER
Reactions: STRAWBERRIES					
=====					
Time	Medication	Dose/Route			

1:00a	ALBUTEROL SOLN,INHL	Dosage: 3MML Route: INHL			
5:00a	ALBUTEROL SOLN,INHL	Dosage: 3MML Route: INHL			
5:00a	PROCHLORPERAZINE TAB	Dosage: 10MG Route: PO			
6:00a	ARTIFICIAL TEARS SOLN,OPH	Dosage: 2 DROPS Route: OPH			
8:00a	ARTIFICIAL TEARS SOLN,OPH	Dosage: 2 DROPS Route: OPH			
9:00a	ALBUTEROL SOLN,INHL	Dosage: 3MML Route: INHL			
9:00a	HALOPERIDOL DECANOATE INJ	Dosage: 50MG Route: IM			
9:00a	MULTIVITAMINS TAB	Dosage: 1 TABLET Route: PO			
10:00a	ARTIFICIAL TEARS SOLN,OPH	Dosage: 2 DROPS Route: OPH			
11:00a	IPRATROPIUM AEROSOL	Dosage: 2 PUFFS Route: INHL			
11:00a	PROCHLORPERAZINE TAB	Dosage: 10MG Route: PO			
12:00n	ARTIFICIAL TEARS SOLN,OPH	Dosage: 2 DROPS Route: OPH			
1:00p	ALBUTEROL SOLN,INHL	Dosage: 3MML Route: INHL			
1:00p	WARFARIN TAB	Dosage: 5MG Route: PO			
2:00p	ARTIFICIAL TEARS SOLN,OPH	Dosage: 2 DROPS Route: OPH			
4:00p	ARTIFICIAL TEARS SOLN,OPH	Dosage: 2 DROPS Route: OPH			
5:00p	ALBUTEROL SOLN,INHL	Dosage: 3MML Route: INHL			
5:00p	PROCHLORPERAZINE TAB	Dosage: 10MG Route: PO			
6:00p	ARTIFICIAL TEARS SOLN,OPH	Dosage: 2 DROPS Route: OPH			
8:00p	ARTIFICIAL TEARS SOLN,OPH	Dosage: 2 DROPS Route: OPH			
9:00p	CLOTRIMAZOLE CREAM,TOP	Dosage: Route: TOP			
9:00p	PHENYTOIN CAP,SA	Dosage: 300MG Route: PO			
10:00p	ARTIFICIAL TEARS SOLN,OPH	Dosage: 2 DROPS Route: OPH			
11:00p	PROCAINAMIDE CAP,ORAL	Dosage: 250MG Route: PO			
11:00p	PROCHLORPERAZINE TAB	Dosage: 10MG Route: PO			
=====					
KZTAAR,*TEST*KEITH D		408-02-9578		Ward: BCMA Room-Bed: A427-02	

EXHIBIT 30: ADMINISTRATION TIMES BY WARD REPORT

=====																								Run Date: JUL 26, 1999@14:35				
WARD ADMINISTRATION TIMES																								Page: 2				
ADMINISTRATION DATE: JUL 26, 1999																												
Ward Location: BCMA																								Division: TOPEKA, KS				
=====																												
Patient Name		Administration Times																										
Room-Bed		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			

LOUISIANA,BCPATIENT																												
SSN: 509680018																												
Room-Bed: BCMA 310-01																												

MAINE,BCPATIENT																												
SSN: 509680019																												
Room-Bed: BCMA 309-02																												

MARYLAND,BCPATIENT																												
SSN: 509680020																												
Room-Bed: BCMA 308-03																												

=====																												
Hourly Totals:			01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
			5		3		15	5	2	5	24	5	12	5	19	6	6	5	21	5	2	5	16	5	11			
Ward Total:			182																									

3.4.6 Due List

The Medication Due List displays the information on the VDL available in the GUI Menu. The report can be printed for specified date/time ranges and by patient or ward. Within patient or ward, the report may include or exclude the following:

- Continuous, PRN, On-Call, and One-time Schedule Types
- Unit-Dose or IV Route medications
- Addendums

To enter information for the report, perform the following steps to enter information on the screen illustrated in Exhibit 31, Due List Report Request Screen.

EXHIBIT 31: DUE LIST REPORT REQUEST SCREEN

BCMA CHUI - KEA! 420

File Edit View Tools Options Help

Request #: DL-19990718-141257 Due List

Start Date: [REDACTED] At: Stop Date: At:

Run by Patient or Ward:

Patient Name:

Ward Location: Sort by Pt or Room-Bed:

Include Schedule - Continuous: Yes Include Order Types - IV: Yes
 PRN: Yes Unit Dose: Yes
 On Call: Yes
 One-Time: Yes Include Addendums: No

Print to DEVICE: BCAUX(VT320)
 Queue To Run At: JUL 18,1999@14:12

Instructions: PF1-E Submit PF1-Q Cancel PF1-R Refresh <Ret> Re-Edit:

COMMAND: Press <PF1>H for help Insert

1(004,014)

Show Buttons

1. In the Start Date field, type the date, and press **<Enter>**.
2. In the first At field, type the time, and press **<Enter>**.
3. In the Stop Date field, type a date, and press **<Enter>**.
4. In the second At field, type a time, and press **<Enter>**.
5. In the Run by Patient or Ward field, type **P** for Patient or **W** for Ward, and press **<Enter>**.
 - (If the report is being sorted by patient) In the Patient Name field, type the patient's name, and press **<Enter>**.

- (If the report is being sorted by ward) In the Ward Location, type in the ward designation, and press <Enter>. In the Sort by Pt or Room-Bed field, type in **P** for Patient or **R** for Room/bed name, and press <Enter>.
- 6. In the Include Schedule fields, type **Y** for the desired schedule type(s) and **N** for the others and, press <Enter>.
- 7. In the Include Order Types, type **Y** or **N** in the IV field and Unit Dose field and press <Enter>. If the user enters **No** in both fields, no orders will print on the report.
- 8. In the Include Addendums field, type **Y** or **N**, and press <Enter>. When **Y** is entered, an additional section called Changes/Addendums to Orders will print at the bottom of the report. This user can use this section to manually record information about a medication administration.
- 9. In the Print to Device field, type the desired printer, and press <Enter>.
- 10. In the <Ret> Re-Edit field, press the **PF1** followed by **E** (Exit) to submit the request for printing. (Other available actions in this field are **PF1 - Q** to Quit this option or **PF1 - R** to Refresh the screen.)
- 11. The screen will now clear and the following message will appear: Submitting your report request to Taskman... Submitted! Your Task Number is:####.

The reports will print in a 132-column output. Exhibit 32, Due List by Patient Report, and Exhibit 33, Due List by Ward Report, show examples of both Due List reports.

EXHIBIT 32: DUE LIST BY PATIENT REPORT

```

=====
MEDICATION DUE LIST for JUL 26, 1999 0800-1000                                Run Date: JUL 26, 1999@14:39
Order Type(s): IV & Unit Dose -- Continuous                                     Page: 1

Patient: KZTAAR,*TEST*KEITH D          SSN: 408-02-9578          DOB: JAN 2,1941 (58)
Sex: MALE                               Ht/Wt: */*              Ward: BCMA Rm A427-02
Dx: PNEUMONIA                          Last Mvmt: APR 8,1999@14:07:51  Type: SPECIALTY TRANSFER

Reactions: STRAWBERRIES
=====
Self
Med  Sched  Medication                                Dose                                Last      Start   Stop    Verifying
Given   Date   Date      Rph/Rn
-----
UD-C    ALBUTEROL SOLN,INHL
      *ALBUTEROL 0.083% INHL SOLUTION
      3ML EA. (7014)
      Spec Inst: <None Entered>          Give: 3MML Q4H
      Admin Times: 0900                  06/03/99@0904 07/05/99 08/04/99 RAC/RAC
-----
UD-C    ARTIFICIAL TEARS SOLN,OPH
      *ARTIFICIAL TEARS /ML (7021)
      Spec Inst: WHILE AWAKE            Give: 2 DROPS
      Admin Times: 0800-1000-1200-1400-1600-1800-2000-2200
      Admin Times: 0800-1000            06/09/99@1609 07/05/99 08/04/99 RAC/RAC
-----
Changes/Addendums to orders
-----
CON ____ PRN ____ Drug: _____ Give: _____ Start: _____ Stop: _____
OT ____ OC ____  Spec _____
                  Inst: _____ Initials: _____ Date: _____
-----
CON ____ PRN ____ Drug: _____ Give: _____ Start: _____ Stop: _____
OT ____ OC ____  Spec _____
                  Inst: _____ Initials: _____ Date: _____
=====
KZTAAR,*TEST*KEITH D                                408-02-9578                                Ward: BCMA Room-Bed: A427-02

```


The Due List by Ward report prints one patient per page.

EXHIBIT 33: DUE LIST BY WARD REPORT

```

=====
MEDICATION DUE LIST for JUL 26, 1999 0800-1000                               Run Date: JUL 26, 1999@14:43
Order Type(s): IV & Unit Dose -- Continuous                                     Page: 1

Patient: CONNECTICUT,BCPATIENT      SSN: 509-68-0007      DOB: DEC 3,1958 (40)
Sex: MALE                           Ht/Wt: */*          Ward: BCMA Rm A427-03
Dx: CHEST PAIN                      Last Mvmt: APR 8,1999@14:14:45  Type: SPECIALTY TRANSFER

Reactions: STRAWBERRIES
=====
Self Med   Sched Medication                                     Dose                               Last Given      Start Date      Stop Date      Verifying
                                                Rph/Rn
-----
UD-C      ARTIFICIAL TEARS SOLN,OPH
          *ARTIFICIAL TEARS /ML (7021)
          Spec Inst: WHILE AWAKE
                                                Give: 2 DROPS
                                                0600-0800-1000-1200-1400-1600-1800-
                                                2000-2200
                                                Admin Times: 0800-1000
                                                07/23/99@0824  07/12/99  08/11/99  KB/***

UD-C      CLOTRIMAZOLE CREAM, TOP
          *CLOTRIMAZOLE 1% CREAM /GM (7071)
          Spec Inst: SMALL AMOUNT TOPICALLY
          TO AREA
                                                Give: QID
                                                Admin Times: 0900
                                                07/21/99@1601  07/12/99  08/11/99  KB/***

UD-C      MULTIVITAMINS TAB
          *MULTIVITAMIN TAB (5512)
          Spec Inst: <None Entered>
                                                Give: 20meg QOD
                                                Admin Times: 0900
                                                07/26/99@0842  07/26/99  08/25/99  KB/***

=====
Changes/Addendums to orders
=====
CON ___ PRN ___ Drug: _____ Give: _____ Start: _____ Stop: _____
Spec
OT ___ OC ___ Inst: _____ Initials: _____ Date: _____

CON ___ PRN ___ Drug: _____ Give: _____ Start: _____ Stop: _____
Spec
OT ___ OC ___ Inst: _____ Initials: _____ Date: _____

=====
CONNECTICUT,BCPATIENT                               509-68-0007                               Ward: BCMA Room-Bed: A427-03

```

3.4.7 PRN Effectiveness List

The PRN Effectiveness List shows administered PRN medications that require an effectiveness comment. After making an entry using the menu option Enter PRN Effectiveness, and selecting one of the medications listed on the following report, the effectiveness will be filed. That entry will no longer display on the report PRN Effectiveness List the next time it is printed.

This report may be printed by nursing ward location or patient.

See Section 3.4.1, Using ScreenMan Format to Request a Report, for instructions on requesting a PRN Effectiveness List.

The printed reports are formatted as shown in Exhibit 34, PRN Effectiveness List by Patient and Exhibit 35, PRN Effectiveness List by Ward.

EXHIBIT 34: PRN EFFECTIVENESS LIST BY PATIENT

=====				Run Date: JUL 26, 1999@14:50	
PRN EFFECTIVENESS LIST from Apr 01, 1999@00:05 thru Jul 26, 1999@08:00				Page: 1	
Patient:	COSMO,RANDY B	SSN:	333-22-1111	DOB:	JAN 16,1924 (75)
Sex:	MALE	Ht/Wt:	170cm/82kg	Ward:	1-4CM-T Rm C417-01
Dx:	COPD	Last Mvmt:	APR 3,1999@14:49:21	Type:	DISCHARGE
Reactions: CODEINE					
=====					
Administration Date/Time		Medication		Administered By	

MAY 18, 1999@07:46:30		LORAZEPAM		TUCKER,CHRIS	
PRN Reason: Anxiety					
MAY 18, 1999@08:43:03		MAGNESIUM HYDROXIDE		TUCKER,CHRIS	
PRN Reason: Constipation					
MAY 18, 1999@08:48:42		LORAZEPAM		TUCKER,CHRIS	
PRN Reason: Anxiety					
MAY 18, 1999@09:29:14		ACETAMINOPHEN		TUCKER,CHRIS	
PRN Reason: Pain					
MAY 18, 1999@09:39:52		MAGNESIUM HYDROXIDE		TUCKER,CHRIS	
PRN Reason: Constipation					
MAY 19, 1999@15:34:02		LORAZEPAM		PETIT,DAN R	
PRN Reason: Anxiety					
JUL 09, 1999@11:06:14		ACETAMINOPHEN		PETIT,DAN R	
PRN Reason: Discomfort					
=====					
COSMO,RANDY B		333-22-1111		Ward: 1-4CM-T Room-Bed: C417-01	

EXHIBIT 35: PRN EFFECTIVENESS LIST BY WARD

```
=====
PRN EFFECTIVENESS LIST  from Apr 01, 1999@08:00 thru Jul 26, 1999@05:00                      Run Date: JUL 26, 1999@14:52
                                                                    Page: 3
```

```
Ward Location: BCMA                                                                    Division: TOPEKA, KS
=====
```

Patient	Administration Date/Time	Ward Rm-Bed Medication	Administered By
	APR 14, 1999@15:32:40 PRN Reason: pain	ACETAMINOPHEN	STUDENT,NURSE TWELVE
ILLINOIS,BCPATIENT BCMA C517-01			
	APR 13, 1999@10:48:08 PRN Reason: Fever	ACETAMINOPHEN	STUDENT,NURSE THIRTEEN
	APR 14, 1999@15:32:43 PRN Reason: Agitation	HALOPERIDOL	STUDENT,NURSE THIRTEEN
INDIANA,BCPATIENT BCMA C521-01			
	APR 13, 1999@13:35:17 PRN Reason: Elevated Blood Sugar	INSULIN REGULAR (HUMULIN)	STUDENT,NURSE FOURTEEN
	APR 14, 1999@12:39:39 PRN Reason: BS 400	INSULIN REGULAR (HUMULIN)	STUDENT,NURSE FOURTEEN
	APR 14, 1999@14:48:30 PRN Reason: INC.BS	INSULIN REGULAR (HUMULIN)	STUDENT,NURSE FOURTEEN
IOWA,BCPATIENT BCMA C522-01			
	APR 13, 1999@10:48:12 PRN Reason: Fever	ACETAMINOPHEN	STUDENT,NURSE FIFTEEN
	APR 14, 1999@14:49:35 PRN Reason: FOR NAUSEA	PROCHLORPERAZINE	STUDENT,NURSE FIFTEEN

3.4.8 Enter PRN Effectiveness

This option allows Nursing to enter effectiveness comments concerning PRN medications that were administered.

To enter PRN Effectiveness comments, perform the following steps:

1. On the BCMA Nursing Option Menu, select option 7, Enter PRN Effectiveness, and press **<Enter>**. Additional information entry fields will display, as illustrated in Exhibit 36, Patient Selection Screen.

EXHIBIT 36: PATIENT SELECTION SCREEN

dhcp.r2w - Reflection 2

File Edit Connection Setup Script Window Help

1 Medication Administration Log
 2 Missed Medications
 3 Edit Medication Log
 4 Ward Administration Times
 5 Due List
 6 PRN Effectiveness List
 7 Enter PRN Effectiveness
 8 Manual Medication Entry
 9 Medication Administration History (MAH)
 10 Missing Dose Request
 11 Medication Variance Log
 12 Drug File Inquiry

Select Medication Administration Menu Nursing Option: 7 Enter PRN Effectiveness

Select Patient Name: cosmo,RANDY B 10-16-30 333221111 NO
 NSC VETERAN TOP
 Consolidate ALL Appts - TRAVEL PT

Select Date to Begin Searching Back From: Today//

869,50 VT400-7 Compose Num Caps Hold

2. In the Select Patient Name field, type the patient's name, and press **<Enter>**.
3. At the Select Date to Begin Searching Back From field, press **<Enter>** to select today's date.
 - If the medication is not administered today, a screen message will appear asking if the user would like to move back one day. Press **<Enter>** to move back. This process will continue until the system reaches a date on which medications were administered. At that time, the list of medications will appear as shown in Exhibit 37, Medication Selection Screen.

EXHIBIT 37: MEDICATION SELECTION SCREEN

Searching Date APR 01, 1999

#	Medication	St	D/T Given	Int
1.	INSULIN	G	APR 01, 1999@12:44:30	CLT
2.	ALUMINUM HYDROXIDE/HG HYDROXIDE/SINETH	G	APR 01, 1999@11:34:19	CLT

Enter a number (1-2): 1

1011.2 | VT400-7 - 152.131.62.17 - TELNET | Compose Nure Caps Hold

4. Enter the number corresponding to the medication needing an effectiveness comment, and press **<Enter>**.
5. The effectiveness comments entry screen displays, as shown in Exhibit 38, PRN Effectiveness Entry Screen.

EXHIBIT 38: PRN EFFECTIVENESS ENTRY SCREEN

The screenshot shows a terminal window titled "677TEST.v2w - Reflection 2". The main content area displays the following text:

```
PRN Effectiveness Entry
-----
Patient: KZTAAR,*TEST*KEITH D
Location: MICU-T 401-01      Division: TOPEKA, KS
Administration Date/Time: APR 1,1999@12:44:30
      Administration By: TUCKER,CHRIS

PRN Reason:
FOR BLOOD SUGAR 325

PRN Effectiveness:
BLOOD SUGAR WAS 375

Exit      Save      Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: E                               Press <PF1>H for help  Insert
```

At the bottom of the terminal window, the status bar shows "1045.11" and "VT400-7 - 152.131.62.17 via TELNET". On the right side of the status bar are buttons for "Compose", "Num", "Caps", and "Hold".

6. In the PRN Effectiveness field, type a comment up to 78 characters long, and press **<Enter>**.
7. In the Command field, type **S** for Save, **E** to Exit, or **R** for Refresh, and press **<Enter>**.

☞ If the user tries to exit the screen and the data has not been saved, the system will display the following message: Save changes before leaving form (Y/N)?. If the user enters **N**, the data will not be saved. If the user enters **Y**, the changes will be saved.

3.4.9 Manual Medication Entry

The Manual Medication Entry option allows the user to manually create a medication administration entry for any order.

- ☛ Medication orders will not be electronically validated with this option. However, the Medication Log will include comments and audits for any order that was entered using the Manual Medication Entry option.

To enter information for the report, perform the following steps:

1. In the Select Patient field of the screen illustrated in Exhibit 39, Manual Medication Entry Patient Selection Screen, type the patient's name or SSN, and press <Enter>.

EXHIBIT 39: MANUAL MEDICATION ENTRY PATIENT SELECTION SCREEN

Manual Medication Entry

Notice: No validation of medications is done with this option.
Entries in the Med Log created with this option will reflect this
in the comments.

Select PATIENT: ARIZONA,BCPATIENT 02-05-42 509680003 NO H
SC VETERAN
Select Orders From Date: Today// (JUL 23, 1999)
Searching for Orders...

Notice: Order #10 (IV) doesn't have administration
times contact Pharmacy to correct before administering.

Enter RETURN to continue or '^' to exit: █

944, 42 VT400-7 -- 152.131.61.252 via TELNET Compose Num Caps Hold

2. In the Select Orders From Date: Today// field, press <Enter> to select today's date, or enter a date and press <Enter>.
3. At the Enter RETURN to continue or '^' to exit field, press <Enter> to continue with the entry. (To return to the main options menu, enter ^, and press <Enter>.)
4. A list of orders for this patient will display as shown in Exhibit 40, Manual Medication Entry Medication Selection Screen.

EXHIBIT 40: MANUAL MEDICATION ENTRY MEDICATION SELECTION SCREEN

Manual Medication Entry		St
#	Sc Medication	
1. C	ASPIRIN TAB,EC	(A) Start: 07/26/1999 0600 Stop: 08/09/1999 2400 Admin Times: 0900
2. C	CEFEPIME INJ,PWDR	(D) Start: 06/28/1999 1435 Stop: 07/26/1999 1037 Admin Times: 1630
3. C	CEFEPIME INJ,PWDR	(A) Start: 07/26/1999 1037 Stop: 08/09/1999 2400 Admin Times: 0900
4. C	DILTIAZEM (TIAZAC) CAP,SA	(A) Start: 07/26/1999 0700 Stop: 08/09/1999 2400 Admin Times: 0900
5. C	MULTIVITAMINS TAB	(A) Start: 07/26/1999 0700 Stop: 08/09/1999 2400 Admin Times: 0900
6. O	LORAZEPAM TAB	(E) Start: 06/30/1999 0905 Stop: 06/30/1999 0905
7. O	SODIUM BIPHOSPHATE/SODIUM PHOSPHATE ENEMA (E)	Start: 06/30/1999 0905 Stop: 06/30/1999 0905
8. P	HYDROCORTISONE CREAM, TOP	(A) Start: 07/20/1999 0856 Stop: 08/03/1999 2400

Enter a number (1-8):

5. In the Enter a number field, enter the desired medication line number shown in the list. Press **<Enter>**. The screen illustrated in Exhibit 41, Administration Time Selection Screen, will display.

EXHIBIT 41: ADMINISTRATION TIME SELECTION SCREEN

The screenshot shows a terminal window titled "677TEST.i2w - Reflection 2". The menu bar includes "File", "Edit", "Connection", "Setup", "Script", "Window", and "Help". Below the menu bar is a toolbar with various icons. The main text area displays the following information:

Order: 118U
Medication: ALBUTEROL INHALANT
Dosage: 3ML
Schedule: CONTINUOUS
Admin Times: 0100-0500-0900-1300-1700-2100

Is this the correct Order? Yes// y (Yes)

Enter the DATE of Administration: Today// (APR 01, 1999)

Select one of the following:

1	0100
2	0500
3	0900
4	1300
5	1700
6	2100

Select Administration Time: 4 1300

Create an administration for APR 01, 1999@13:00? Yes//

The status bar at the bottom shows "1108.56" on the left, "VT400-7-152131.62:17 via TELNET" in the center, and "Compose Num Caps Hold" on the right.

4. In the Is this the correct Order? Yes// field press **<Enter>** to accept the order. (If the user enters **No**, the screen reverts to the Manual Medication Entry Medication Selection Screen, shown in Exhibit 40.)
5. In the Enter the Date of Administration field, enter the desired date, and press **<Enter>**.
6. In the Select Administration Time field, enter the number of the desired administration time from the list on the screen. Press **<Enter>**.
7. The administration date and time will display in the Create An Administration field. If the date and time are correct, press **<Enter>**. (If the date and time are not correct, enter **No** in the Create An Administration field. The screen will revert to the Manual Medication Entry Medication Selection Screen, as shown in Exhibit 40.) The manual entry screen displays, as shown in Exhibit 42, Medication Log Manual Entry Screen.

EXHIBIT 42: MEDICATION LOG MANUAL ENTRY SCREEN

Medication Log Manual Entry - Unit Dose Order

Patient: KZTAAR, *TEST*KEITH D SSN: 408029575

Medication: ALBUTEROL

Admin Status: GIVEN Admin Date/Time: APR 1, 1999@15:27:17

Injection Site:

PRN Reason:

PRN Effectiveness:

Dispense Drugs...

Comment (Required):
order was missed earlier

Exit Save Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: e Press <PF1>H for help **Insert**

1038.42 VT4007 - 152.131.62.17 via TELNET

14. In the Admin Status field, type in **G** for Given, **H** for Held, or **R** for Refused, and press **<Enter>**.
15. In the Admin Date/Time field, enter the actual administration date and time, and press **<Enter>**.
16. In the Injection Site field, enter a free-text comment, and press **<Enter>**.
17. In the PRN Reason field, enter a free-text comment, and press **<Enter>**.
18. In the PRN Effectiveness field, enter a free-text comment, and press **<Enter>**.
19. In the Dispense Drugs field, press **<Enter>**. A Dispense Drugs box will display the Dispense Drug(s) associated with this order and the number of units ordered.
 - Change the dispensed drug if desired, and press **<Enter>**.
 - A field for Units Given will display. Enter a number between 0 and 999 (up to two decimal digits) and press **<Enter>**.
 - The Units field will display. This is a free-text field used to enter the units. Type in whatever form is being dispensed, such as tab, capsule, liquid, and so on.
 - After the Dispense Drugs information is complete, press **<Enter>** twice.
 - At the COMMAND: Close prompt, press **<Enter>** again.
20. In the Comment (Required) field, type a free-text comment, and press **<Enter>**.
21. In the Command field, type **S** for Save, **E** for Exit, or **R** for Refresh, and press **<Enter>**.

If **E** is selected, the user will be prompted with the following message: Save changes before leaving form (Y/N)? Type **Y** for Yes to save the changes.

22. The screen will display the following message: Enter RETURN to continue or '^' to exit.

- To create another medication administration entry, press <**Enter**> twice.
- To return to the main options screen, enter ^.

3.4.10 Medication Administration History (MAH)

The electronic MAH can be printed for a specified date range for a single patient or a ward and shows medications that have been marked as Given, Held, or Refused.

☛ The report prints a 7-day history, running from Sunday to Saturday. For example, if the user enters Start and Stop Dates that fall in the middle of a week, the report will show the medication history from the previous Sunday to the following Saturday.

See Section 3.4.1, Using ScreenMan Format to Request a Report, for instructions on requesting the MAH.

Exhibit 43, Medication Administration History by Patient Report, shows an example of the MAH report.

EXHIBIT 43: MEDICATION ADMINISTRATION HISTORY BY PATIENT REPORT

=====

Continuing/PRN/Stat/One Time Medication/Treatment Record (VAF 10-2970 B, C, D)

Run Date: JUL 26, 1999@10:53

Page: 1

Patient: KZTAAR,*TEST*KEITH D

SSN: 408-02-9578

DOB: JAN 2,1941 (58)

Sex: MALE

Ht/Wt: */*

Ward: BCMA Rm A427-02

Dx: PNEUMONIA

Last Mvmt: APR 8,1999@14:07:51

Type: SPECIALTY TRANSFER

Reactions: STRAWBERRIES

=====

Start Date	Stop Date	Admin Times	04/11/1999	04/12/1999	04/13/1999	04/14/1999	04/15/1999	04/16/1999	04/17/1999
04/14/1999	05/14/1999	24:00	0500			0519 N2	0515 N2		
ACETAMINOPHEN TAB		1100				R1130 N2	H1146 N2		
ACETAMINOPHEN 325MG TAB		1700				1729 N3	1746 N3		
Give: 650MG PO Q6H		2300				2255 N3	2310 N3		

RPH: P2 RN: N2									

04/13/1999	04/23/1999	24:00	0500		1324 N2		1400 N2		
AMOXICILLIN CAP,ORAL		1300							
AMOXICILLIN 250MG CAPS Give:		2100							
250MG PO Q8H									
Spec Inst: FOR 10 DAYS ONLY									

RPH: P2 RN: N2									

04/13/1999	05/13/1999	24:00	0600			0913 N2	1325 N3		
ARTIFICIAL TEARS SOLN,OPH		0800				1400 N2	1330 N2		
ARTIFICIAL TEARS /ML Give: 2		1000					1400 N2		
GTTS OPH		1200					1401 N2		
0600-0800-1000-1200-1400-1600-		1400							
-1800-2000-2200		1600							
Spec Inst: WHILE AWAKE		1800							
RPH: P2 RN: N2		2000							
		2200							

3.4.11 Missing Dose Request

This option allows the user to submit a Missing Dose Request to Pharmacy using the screen illustrated in Exhibit 44, Missing Dose Request Screen. Once submitted, the request prints on a predefined printer and an electronic MailMan message is sent to the predefined mail group.

EXHIBIT 44: MISSING DOSE REQUEST SCREEN

677TEST i2w - Reflection 2

File Edit Connection Setup Script Window Help

Request #: MD-19990401-163917 Missing Dose Request

Requesting User: TUCKER, CHRIS Division: TOPEKA, KS

Request Date/Time: APR 1, 1999@16:39

Patient Name: KZTAAR,*TEST*KEITH D

Ward Location: MICU-T

Missing Drug: ACETAMINOPHEN 325MG TAB

Dosage Needed: 650mg

Reason Needed: DROPPED

Administration Date/Time: APR 1, 1999@16:43

Needed by Date/Time: APR 1, 1999@17:00

Exit Save Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: E Press <PF1>H for help Insert

978.11 V1400-7 - 152131.6217 via TELNET Compose Num Caps Hold

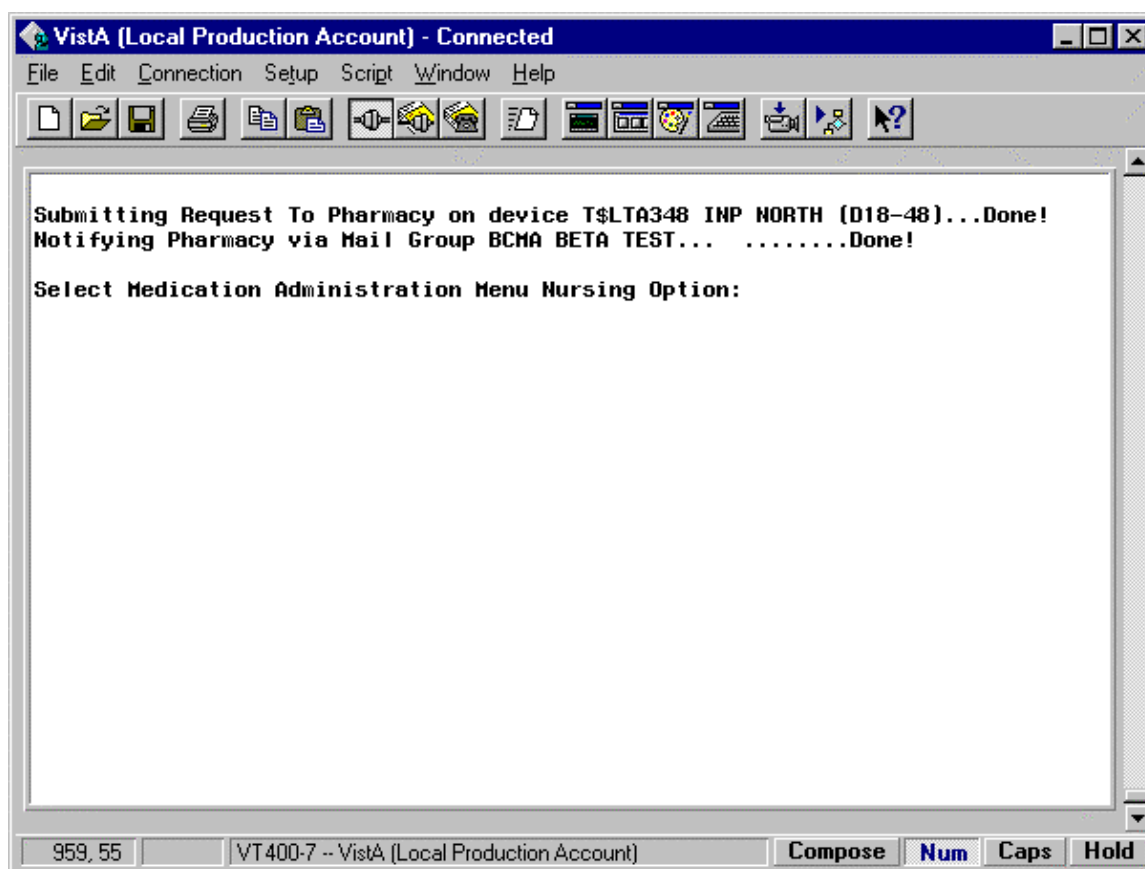
To enter a Missing Dose Request, perform the following steps:

1. In the Patient Name field, type the patient's name, and press **<Enter>**.
 2. In the Ward Location field, type the ward designation, and press **<Enter>**.
 3. In the Missing Drug field, type the medication, and press **<Enter>**.
- To view a list of appropriate formats for the Missing Drug field, type a **?** in the Missing Drug field and press **<Enter>**. Explanation of the ways to enter a medication will display on the bottom part of the screen.
4. In the Dosage Needed field, type the dosage, and press **<Enter>**.
 5. In the Reason Needed field, type a reason, and press **<Enter>**.
- To view a list of allowable reasons, type **?** in the Reason Needed field, and press **<Enter>**. The list of reasons will display on the bottom part of the screen.

6. In the Administration Date/Time field, type a date and time (in date@time format), and press **<Enter>**.
7. In the Needed by Date/Time: field, type a date and time (in date@time format), and press **<Enter>**.
8. In the COMMAND field, type **S** for Save, **E** for Exit, or **R** for Refresh, and press **<Enter>**.

☛ If the user tries to exit the screen and the data has not been saved, the system will display the following message: Save changes before leaving form (Y/N)?. If the user enters **N**, the data will not be saved. If the user enters **Y**, the changes will be saved. The menu selection screen will display with a message confirming that the request has been submitted to Pharmacy via the appropriate mail group, as shown in Exhibit 45, Missing Dose Request Confirmation Screen.

EXHIBIT 45: MISSING DOSE REQUEST CONFIRMATION SCREEN



The Missing Dose Request will print on the designated printer. The e-mail message that is generated appears as shown in Exhibit 46, Missing Dose E-Mail Notification

EXHIBIT 46: MISSING DOSE E-MAIL NOTIFICATION

Subj: Missing Dose Request Entered [#7765114] 01 Apr 99 05:57 11 Lines
From: ACME Pills in 'IN' basket. Page 1 **NEW**

A request for a missing dose has been entered into the system.

Request IEN#: 15694

User Entering: DOMNANISH, JOAN
Patient: KZTAAR,*TEST* KEITH D
Ward Location: A3MED IM-L
Drug: ACETAMINOPHEN 325MG
Dose: 650MG
Time Needed: APR 1,1999@1700

Thank You

Select MESSAGE Action: IGNORE (in IN basket)//

3.4.12 Medication Variance Log

With the Medication Variance Log, users with the PSB MANAGER security key can print or display exceptions to medication administration.

See Section 3.4.1, Using ScreenMan Format to Request a Report, for instructions on requesting a Medication Variance Log.

The Variance Log can run by patient or by ward, as shown in Exhibit 47, Medication Variance Log Report by Patient, and Exhibit 48, Medication Variance Log Report by Ward.

EXHIBIT 47: MEDICATION VARIANCE LOG REPORT BY PATIENT

=====						=====	
MEDICATION VARIANCE LOG						Run Date: JUL 26, 1999@15:09	
						Page: 1	
Patient:	COSMO,RANDY B		SSN:	333-22-1111	DOB:	JAN 16,1924 (75)	
Sex:	MALE		Ht/Wt:	170cm/82kg	Ward:	1-4CM-T Rm C417-01	
Dx:	COPD		Last Mvmt:	APR 3,1999@14:49:21	Type:	DISCHARGE	
Reactions: CODEINE							
=====							
Event	Date/Time	Event	Var	Medication			

JUL 16,	1999@12:51:20	EARLY/LATE DOSE	771	POTASSIUM CHLORIDE			
JUL 16,	1999@12:54:35	EARLY/LATE DOSE	774	POTASSIUM CHLORIDE			
JUL 16,	1999@14:49:11	EARLY/LATE DOSE	-84	BACITRACIN			
JUL 19,	1999@15:30:20	EARLY/LATE DOSE	-330	PHENYTOIN			
=====							
COSMO,RANDY B						333-22-1111	Ward: 1-4CM-T Room-Bed: C417-01

👉 A variance preceded by a minus sign (such as -24) indicates the number of minutes a medication was given before the administration time.

EXHIBIT 48: MEDICATION VARIANCE LOG REPORT BY WARD

=====						Run Date: JUL 26, 1999@15:11	
MEDICATION VARIANCE LOG						Page: 2	
=====							
Ward Location: BCMA						Division: TOPEKA, KS	
=====							
Ward	Patient Name	Event Date/Time	Event	Var	Medication		

BCMA C517-01	ILLINOIS,BCPATIENT	APR 14, 1999@14:31:32	EARLY/LATE DOSE	544	POTASSIUM CHLORIDE		
		APR 14, 1999@14:31:32	EARLY/LATE DOSE	-99	ACETAMINOPHEN		
		APR 14, 1999@14:31:32	EARLY/LATE DOSE	-63	IPRATROPIUM		
		APR 14, 1999@14:31:32	EARLY/LATE DOSE	66	ARTIFICIAL TEARS		
		APR 14, 1999@15:23:08	EARLY/LATE DOSE	-337	DEXTROSE 5%/WATER		
		APR 14, 1999@15:50:41	EARLY/LATE DOSE	-430	PROCHLORPERAZINE		
BCMA C521-01	INDIANA,BCPATIENT	APR 14, 1999@14:31:32	EARLY/LATE DOSE	545	POTASSIUM CHLORIDE		
		APR 14, 1999@14:31:32	EARLY/LATE DOSE	-200	DIGOXIN		
		APR 14, 1999@14:49:40	EARLY/LATE DOSE	109	MOISTURIZING LOTION		
		APR 14, 1999@15:01:07	EARLY/LATE DOSE	511			
		APR 14, 1999@15:02:06	EARLY/LATE DOSE	511			
BCMA C522-01	IOWA,BCPATIENT	APR 14, 1999@14:31:32	EARLY/LATE DOSE	546	POTASSIUM CHLORIDE		
		APR 14, 1999@14:31:32	EARLY/LATE DOSE	580	POTASSIUM CHLORIDE		
		APR 14, 1999@14:53:47	EARLY/LATE DOSE	-127			
		APR 14, 1999@14:54:31	EARLY/LATE DOSE	-127			
		APR 14, 1999@14:55:51	EARLY/LATE DOSE	-125	ASCORBIC ACID		
		APR 14, 1999@15:01:29	EARLY/LATE DOSE	121	DIGOXIN		
BCMA 308-04	KANSAS,BCPATIENT	APR 14, 1999@14:31:32	EARLY/LATE DOSE	545	POTASSIUM CHLORIDE		
		APR 14, 1999@14:55:43	EARLY/LATE DOSE	115	AMOXICILLIN		
		APR 14, 1999@15:01:07	EARLY/LATE DOSE	121	DIGOXIN		
BCMA 309-01	KENTUCKY,BCPATIENT	APR 14, 1999@14:31:31	EARLY/LATE DOSE	266	CEFTAZIDIME		
		APR 14, 1999@14:31:32	EARLY/LATE DOSE	480	POTASSIUM CHLORIDE		
		APR 14, 1999@14:31:32	EARLY/LATE DOSE	-180	AMOXICILLIN		
		APR 14, 1999@14:31:32	EARLY/LATE DOSE	-453	CEFTAZIDIME		
		APR 14, 1999@14:31:32	EARLY/LATE DOSE	785	POTASSIUM CHLORIDE		
		APR 14, 1999@14:31:32	EARLY/LATE DOSE	820	POTASSIUM CHLORIDE		
		APR 14, 1999@15:04:30	EARLY/LATE DOSE	-116	ASCORBIC ACID		
		APR 15, 1999@13:46:31	EARLY/LATE DOSE	526	IPRATROPIUM		
		APR 15, 1999@13:46:45	EARLY/LATE DOSE	166	IPRATROPIUM		
		APR 15, 1999@13:48:56	EARLY/LATE DOSE	228	ARTIFICIAL TEARS		

3.4.13 Drug File Inquiry

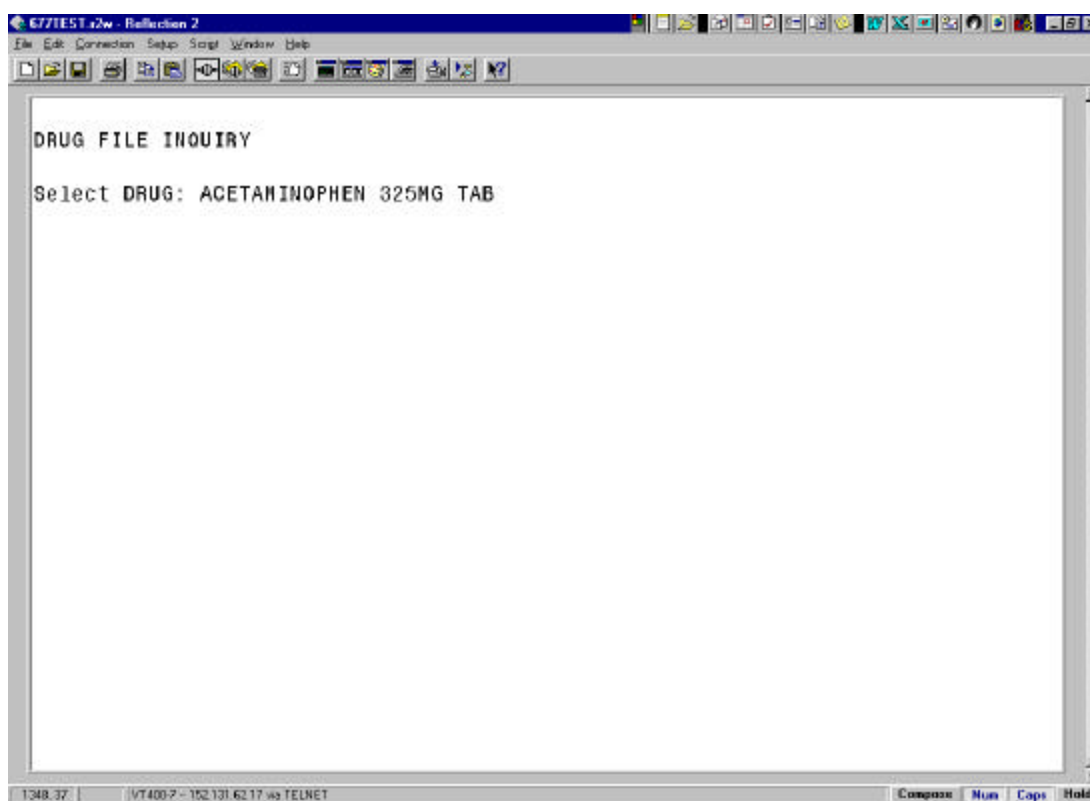
The Drug File Inquiry allows Nursing and Pharmacy to check the bar coded IEN numbers listed on unit dose drugs. If the incorrect bar code is affixed, the Drug File Inquiry will help the user resolve the discrepancy.

To run a Drug File Inquiry, perform the following steps:

3. In the Select Drug field of the screen, as shown in Exhibit 49, Drug File Inquiry Screen 1, type the name and dosage of the drug, and press <Enter>.

☛ To display a list of standard formats for listing a medication, enter ? in the Select Drug field, and press <Enter>.

EXHIBIT 49: DRUG FILE INQUIRY SCREEN 1



4. The Drug File information will display, as illustrated in Exhibit 50, Drug File Inquiry Screen 2.

EXHIBIT 50: DRUG FILE INQUIRY SCREEN 2

The screenshot shows a window titled "677TEST.r2w - Reflection 2" with a menu bar (File, Edit, Connection, Setup, Script, Window, Help) and a toolbar. The main display area contains the following text:

```
DRUG NAME: ACETAMINOPHEN 325MG TAB (IEN: 263)
-----
PRICE PER DISPENSE UNIT:      0.004
NATIONAL DRUG CLASS:          CN103
NON-FORMULARY:
QUANTITY DISPENSE MESSAGE:    DISPENSE IN MULTIPLES OF 100
CMOP DISPENSE:                YES
MESSAGE:                       90 DAY FILL *ATC A/B*

SYNONYMS:
    APAP                      TYLENOL
    ACET325                   000677000100
    051111048893
```

The status bar at the bottom shows "415, 42", "VT400-7 -- 152.131.62.17 via TELNET", and buttons for "Compose", "Num", "Caps", and "Hold".

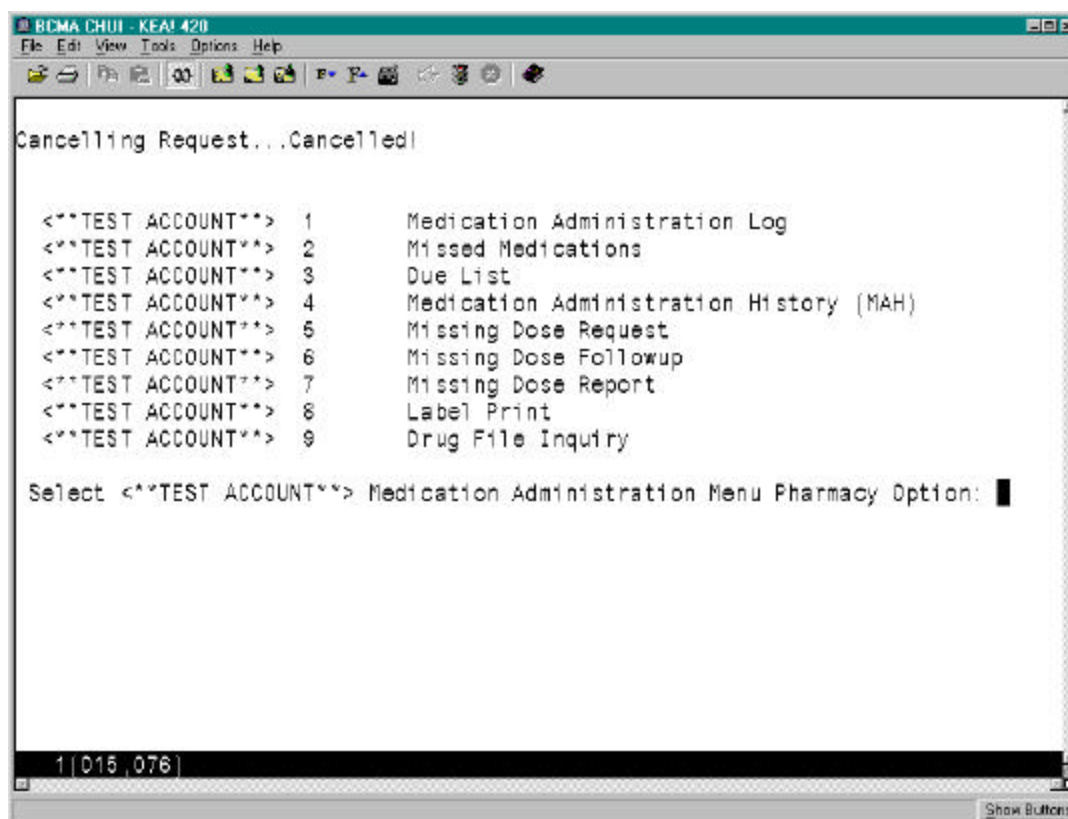
- ☞ The Internal Entry Number (IEN) appears on the first line, to the right of the Drug Name. This IEN is unique to this drug file entry. In most cases, it is the bar coded number on the unit-dose packages that are created in the pharmacy. The NDC bar codes may appear in the synonym field of this display. If the drug is non-formulary, the Non-Formulary field will be set to N/F.

3.5 Medication Administration Pharmacy Menu

The Pharmacy Option menu of BCMA allows Pharmacy personnel to access information that has been entered via the VDL. Because BCMA operates in real time, scanned information is available as soon as the scan is successfully completed. The Pharmacy menu as shown in Exhibit 51, BCMA Medication Administration Menu Pharmacy Option Screen, may be accessed from any *VISTA*-enabled terminal within the medical center.

- ☛ Several of these options are available under both the Nursing and Pharmacy menu options. The options that are unique to Pharmacy include Missing Dose Follow-up, Missing Dose Report, and Label Print.

EXHIBIT 51: MEDICATION ADMINISTRATION MENU PHARMACY OPTION SCREEN



To select any of the options, perform the following steps:

7. The cursor will be flashing at the Select Medication Administration Menu Pharmacy Option prompt at the bottom of the screen.
8. Enter the number of the desired option.
9. Press **<Enter>** to display the sort screen for the option chosen.



3.5.1 Requesting Reports

Many of the Pharmacy options use a common screen to define selection criteria for reports. See Exhibit 20, Report Request Using ScreenMan Format, in Section 3.4, Medication Administration Nursing Menu for a sample report request screen. Instructions for using this screen are given in Section 3.4.1, Using ScreenMan Format to Request a Report. Other options use specific screens, and they are discussed in the sections that follow.

3.5.2 Medication Administration Log

See Section 3.4.2, Medication Administration Log, in the Nursing Menu for instructions on using this option, as well as sample screens and reports.

3.5.3 Missed Medications

See Section 3.4.3, Missed Medications, in the Nursing Menu for instructions on using this option, as well as sample screens and reports.

3.5.4 Due List

See Section 3.4.6, Due List, in the Nursing Menu for instructions on using this option, as well as sample screens and reports.

3.5.5 Medication Administration History (MAH)

See Section 3.4.10, Medication Administration History (MAH), in the Nursing Menu for instructions on using this option, as well as sample screens and reports.

3.5.6 Missing Dose Request

See Section 3.4.11 Missing Dose Request, in the Nursing Menu for instructions on using this option, as well as sample screens and reports.

3.5.7 Missing Dose Follow-up

The Missing Dose Follow-up allows Pharmacy to electronically respond to a Missing Dose Request submitted by Nursing. Pharmacy can enter a reason the dose was missing, the time the dose was delivered, and who delivered the dose.

To create a Missing Dose Follow-up message, perform the following steps:

1. In the Select Missing Dose Request field of the screen illustrated by Exhibit 52, Missing Dose Follow-up Screen, select the missing dose number from the list provided, and press <Enter>.

EXHIBIT 52: MISSING DOSE FOLLOW-UP SCREEN

dhcpr2w - Reflection 2

File Edit Connection Setup Script Window Help

Currently Unresolved Missing Dose Requests

1.	MD-19990726-114414	KANSAS,BCPATIENT	1-4CI-T
	ACETAMINOPHEN 325MG TAB		
2.	MD-19990716-152522	ARIZONA,BCPATIENT	BCMA
	FUROSEMIDE 10MG/ML INJ /ML		
3.	MD-19990716-132115	ARIZONA,BCPATIENT	BCMA
	FUROSEMIDE 10MG/ML INJ /ML		
4.	MD-19990716-075607	MASSACHUSETTS,BCPATIENT	BCMA
	FUROSEMIDE 10MG/ML INJ /ML		
5.	MD-19990715-093041	INDIANA,BCPATIENT	BCMA
	ALBUTEROL 0.083% INHL SOLUTION 3ML EA.		
6.	MD-19990714-160406	KENTUCKY,BCPATIENT	BCMA
	CLOTRIMAZOLE 1% CREAM /GM		
7.	MD-19990714-144311	INDIANA,BCPATIENT	BCMA
	ARTIFICIAL TEARS /ML		
8.	MD-19990713-154840	COSMO,RANDY B	1-4CI-T
	IPRATROPIUM BROMIDE INHALER		

Select Missing Dose Request #: (1-8): █

9535, 40 VT400-7 -- vista via TELNET Compose Num Caps Hold

2. The Missing Dose Request Pharmacy Follow-up Information screen will appear, as shown in Exhibit 53.

EXHIBIT 53: MISSING DOSE REQUEST PHARMACY FOLLOW-UP INFORMATION SCREEN

677TEST i2w - Reflection 2

File Edit Connection Setup Script Window Help

Request #: MD-19990401-165501 Missing Dose Request

Requesting User: TUCKER, CHRIS Division: TOPEKA, KS

Request Date/Time: APR 1, 1999@16:55

Patient Name: KZTAAR, *TEST*KEITH D Ward: NICU-T

Drug Requested: ACETAMINOPHEN 325MG TAB

***** Pharmacy Followup Information *****

Dose Delivered: YES

Delivered By: TUCKER, CHRIS

Delivery Date/Time: APR 2, 1999@07:36

Pharmacy Reason Needed: NOT ENOUGH PRNS

Exit Save Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: E [REDACTED] Press <PF1>H for help Insert


518.11 VT400-7 - 152131.6217 TELNET Compose Numb Caps Hold

4. In the Dose Delivered field, type **Yes**, and press **<Enter>**.
- ➡ There may be instances where a missing dose is requested for an item that is no longer active. If the medication is no longer an active order or will not be delivered, enter **No** in this field.
5. In the Delivery Date/Time field, type **N** for Now or the date and time that the dose was delivered, and press **<Enter>**.
6. In the Pharmacy Reason Needed field, type a number that corresponds to a selection in the Exhibit 54, Pharmacy Reasons Needed Selection Table.

EXHIBIT 54: PHARMACY REASONS NEEDED SELECTION TABLE

1	WS/FILL ON REQUEST
2	FOUND IN DRAWER
3	PHARMACIST ERROR
4	EXPIRED/NO ORDER
5	ATC ERROR
6	NOT ENOUGH PRNS
7	TECHNICIAN ERROR
8	ON PRE- EXCHANGE/PICK LIST
9	PATIENT TRANSFERRED
10	NURSE ADMIN ERROR

7. In the COMMAND field, type **S** to Save, **E** to Exit, or **R** to Refresh, and press **<Enter>**.

 If the user tries to exit the screen and the data has not been saved, the system will display the following message: Save changes before leaving form (Y/N)?. If the user enters **N**, the data will not be saved. If the user enters **Y**, the changes will be saved. The system confirms that the information has been saved and returns the user to the Select Medication Administration Menu Pharmacy Option.

3.5.8 Missing Dose Report

The Missing Dose Report provides information about missing doses that were submitted by ward or for all wards. To request a Missing Dose Report, use the screen illustrated in Exhibit 55, Missing Dose Report Request Screen.

EXHIBIT 55: MISSING DOSE REPORT REQUEST SCREEN

Request #: MD-19990726-115926 Missing Dose By Ward

Start Date: APR 14,1999 At: 0:01a

Stop Date: APR 17,1999 At: 12:00m

Ward (Return for All): BCMA

Print to DEVICE: BROWSER
Queue To Run At: JUL 26,1999@11:59

Instructions: PF1-E Submit PF1-Q Cancel PF1-R Refresh <Ret> Re-Edit: █

COMMAND: Press <PF1>H for help **Insert**

9029.76 VT4007 - vsta via TELNET Compose Num Caps Hold

1. In the Start Date field, type in the start date of the report, and press **<Enter>**. (The cursor will move to the next field each time **<Enter>** is pressed.)
- ☞ To display a list of standard date and time formats, enter **?** in any date or time field, and press **<Enter>**.
2. In the first At field, type the start time of the report (in HHMM format), and press **<Enter>**.
3. In the Stop Date field, type in the stop date, and press **<Enter>**.
4. In the second At field, type the stop time (in HHMM format), and press **<Enter>**.
5. At the Ward (Return for All) field, type in the desired ward and press **<Enter>**. To select all wards, do not enter a specific ward; just press **<Enter>**

A sample report is shown in Exhibit 56, Missing Dose Report.

EXHIBIT 56: MISSING DOSE REPORT

=====		
MISSING DOSE REPORT FROM APR 14, 1999@00:01 thru APR 17, 1999@24:00		Run Date: JUL 26, 1999@12:02
SELECTED WARDS		Page: 1
=====		
Ward Location	Medication	Total

BCMA	ACETAMINOPHEN 325MG TAB	2
	ACETAMINOPHEN 500MG CAPLET	1
	ALPRAZOLAM 1MG TAB	1
	AMOXICILLIN 250MG CAPS	1
	ASCORBIC ACID 500MG TAB	1
	DIAZEPAM 10MG TAB	2
	DIGOXIN 0.05MG/ML ELIX (60CC)	1
	DIGOXIN 0.125MG TAB	3
	DIPHENHYDRAMINE 25MG CAP	1
	DOCUSATE SODIUM 100MG CAP	1
	FUROSEMIDE 20MG TABS	2
	HALOPERIDOL 2MG TAB	1
	HALOPERIDOL CONCENTRATE 2MG/ML (ML)	1
	HALOPERIDOL DECANOATE 100MG/ML INJ /ML	1
	HYDROCORTISONE 1% CREAM /GM	1
	INSULIN REGULAR (HUMULIN) U-100 10ML	1
	IPRATROPIUM BROMIDE INHALER	17
	MULTIVITAMIN TAB	1
	OXYCODONE 5MG/APAP 325MG TAB	1
	OXYCODONE 5MG/APAP 325MG TAB UD	1
	PROCHLORPERAZINE 10MG TAB	4
	PROCHLORPERAZINE INJ 5MG/ML (ML)	2
	RESERPINE 0.1MG TAB	17
	THEOPHYLLINE 125MG TAB	1
Ward BCMA Total:		65
		=====
Report Total:	65	

3.5.9 Label Print

The Label Print option allows Pharmacy to create bar coded medication labels using a Zebra printer. Exhibit 57, Bar Code Label Screen, illustrates the screen used to create bar code labels.

EXHIBIT 57: BAR CODE LABEL SCREEN

BCMA CHUI - KEAM 420

Request #: BL-19990802-096832 Bar Code Label

Drug Name: [REDACTED]

Lot #:

Expiration Date:

Manufacturer:

Quantity:

Filled By:

Checked By:

Labels: 1

Patient Name:

Dosage:

Print to DEVICE:

Queue To Run At: AUG 2, 1999 09:58

Instructions: PF1-E Submit PF1-Q Cancel PF1-R Refresh <Ret> Re-Edit:

COMMAND: Press <PF1>H for help Insert

1(004,013)

To create bar code labels, perform the following steps:


☛ The Drug Name, Filled By, and Checked By fields are required.

1. In the Lot # field, enter the Lot #, and press **<Enter>**.
2. In the Expiration Date field, enter a date, and press **<Enter>**.
3. In the Manufacturer field, enter the manufacturer's name, and press **<Enter>**.
4. In the Quantity field, enter a quantity between 0.25 and 9999 (up to two decimal places), and press **<Enter>**.
5. In the Filled By field, type your initials, and press **<Enter>**.
6. In the Checked By field, type your initials, and press **<Enter>**.

☛ If it is unknown who will fill or check the order, enter three underscores in the Filled By or Checked By fields, and press **<Enter>**. This will give someone space to initial the label at a later time.

7. In the # Labels field, type the number of labels needed between 1 and 999, and press **<Enter>**.


8. In the Patient Name field, type the patient's name, and press **<Enter>**.
9. In the Dosage field, enter a dosage and press **<Enter>**.

 The Dosage field will accept entries from two to 30 alpha/numeric characters.

10. In the Print to Device field, type the Zebra printer assigned to the ward, and press **<Enter>**.
11. In the Queue to Run At field, enter a date and time, and press **<Enter>**.
12. In the **<RET>** Re-Edit field, press **PF1 - E** to print the label, **PF1 - Q** to Quit or **PF1 - R** to Refresh the screen.

A sample label is shown in Exhibit 58, Sample Bar Code Label.

EXHIBIT 58: SAMPLE BAR CODE LABEL

Drug: BECLOMETHASONE INHALER	
	KZTAAR,*TEST*KEITH D
	Ward: BCMA
	
1644	Filled /Checked By; CLT/CLT

3.5.10 Drug File Inquiry

The Drug File Inquiry allows Pharmacy to check the bar code IEN numbers listed on dispensed unit dose drugs. If the incorrect bar code is affixed, the Drug File Inquiry will help the user resolve the discrepancy. See Section 3.4.13, Drug File Inquiry, in the Nursing Menu for instructions on using this option, as well as sample screens and reports.

3.6 Missing Dose Follow-up

See Section 3.5.7, Missing Dose Follow-up, in the Pharmacy Menu for instructions on using this option, as well as sample screens and reports.

3.7 Reset User Parameters

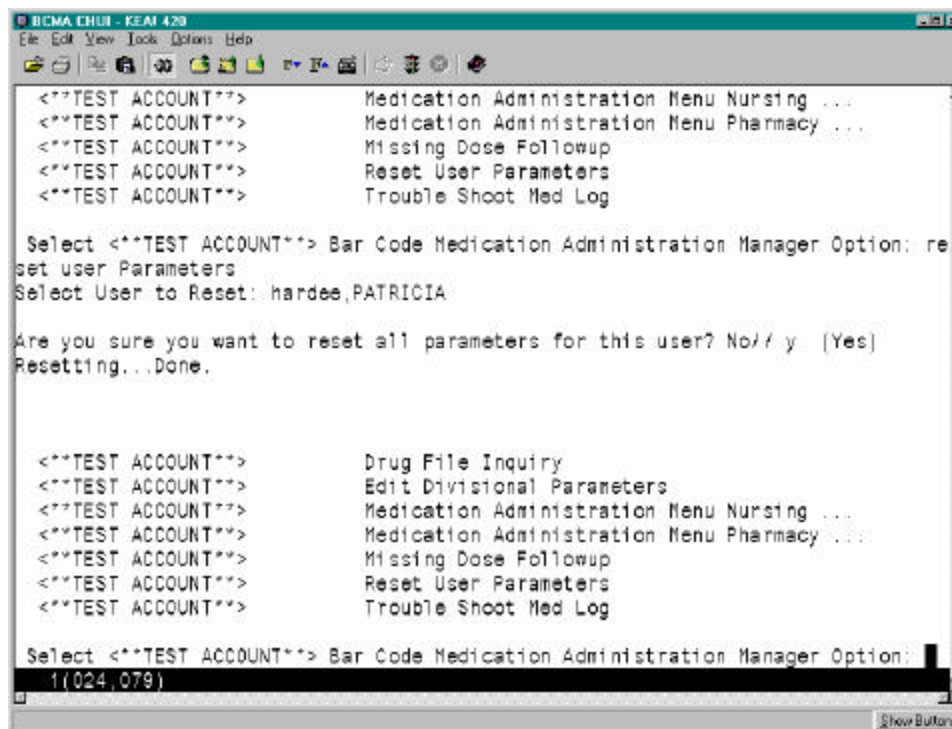
This option allows the BCMA manager to reset a user's default parameters. If the user is unable to access a screen or otherwise is not satisfied with the user set parameters, The BCMA manager can reset the user to the default user settings.

☛ See Section 3.1, Using the Bar Code Medication Administration Manager Option Menu, for instructions on selecting manager options, including Reset User Parameters.

To reset user parameters, perform the following steps:

1. At the Select User to Reset: prompt, enter the user's name, and press <Enter>.
2. The screen will prompt the user with: Are you sure you want to reset all parameters for this user? No//
 - To accept the default answer of No, press <Enter>. The user-entered parameters will **not** be reset, and the manager will be returned to the main manager option menu.
 - To reset the user parameters, type **Y** at the prompt, and press <Enter>. A screen message will confirm that user parameters have been reset.

Exhibit 59, Reset User Parameters Sequence Screen, illustrates the prompts described above.

EXHIBIT 59: RESET USER PARAMETERS SEQUENCE SCREEN

3.8 Trouble Shoot Med Log

The Trouble Shoot Med Log option allows the BCMA manager to determine the reason a medication is not scanning. This option can be used when medications are being scanned during a med pass, but the medication will not register as Given on the VDL.

➤ See Section 3.1, Using the Bar Code Medication Administration Manager Option Menu, for instructions on selecting manager options, including Trouble Shoot Med Log.

To use the Trouble Shoot Med Log option, perform the following steps:

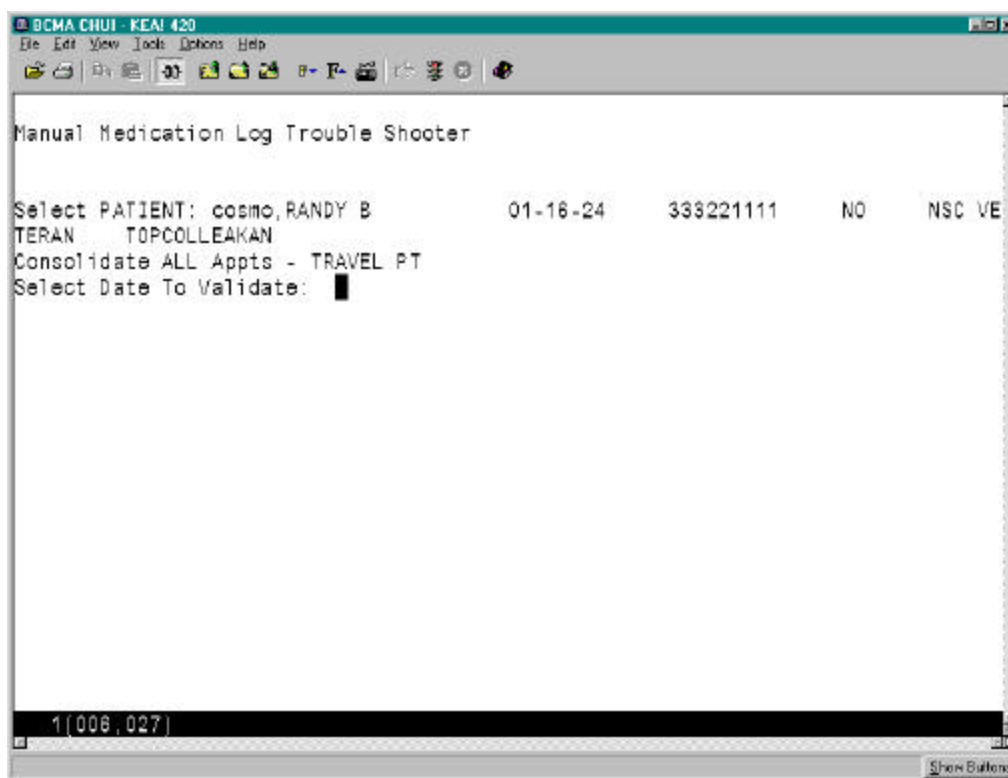
1. At the Select PATIENT prompt, enter the patient's name, and press <Enter>.

➤ For a list of standard name and date formats, type ? in the Select PATIENT and Select Date to Validate fields. Press <Enter>. The system will display standard name and date formats.

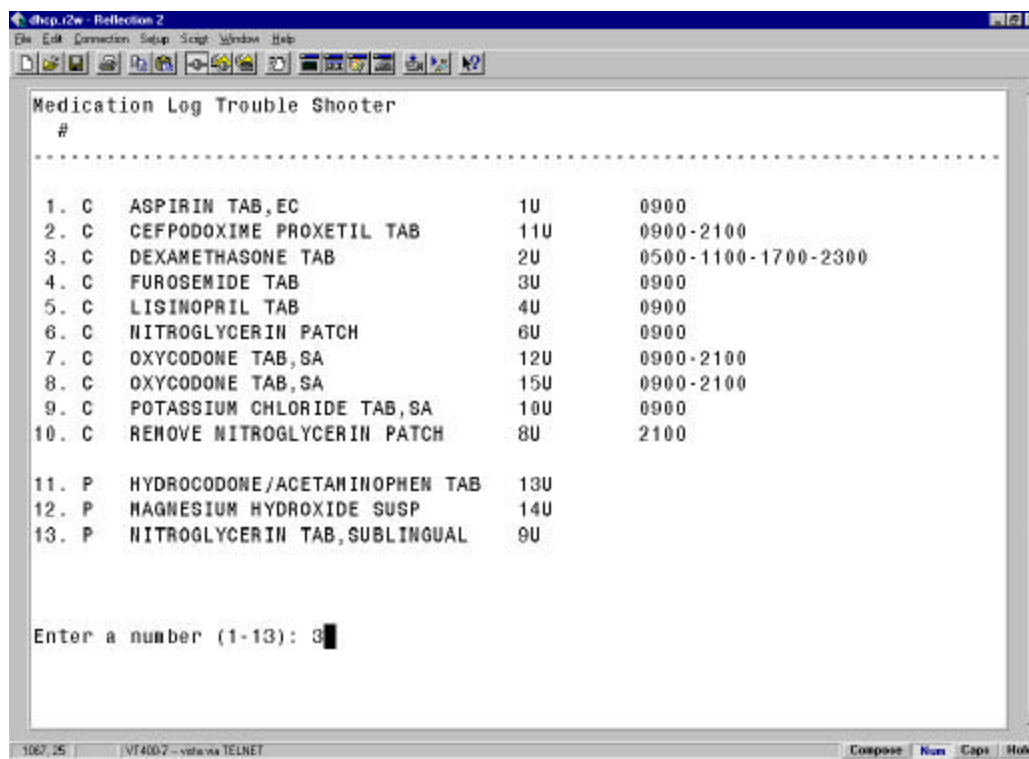
2. At the Select Date to Validate prompt, enter the desired date, and press <Enter>.

Exhibit 60, Trouble Shoot Med Log Sequence Screen, shows the prompts described above.

EXHIBIT 60: TROUBLE SHOOT MED LOG SEQUENCE SCREEN



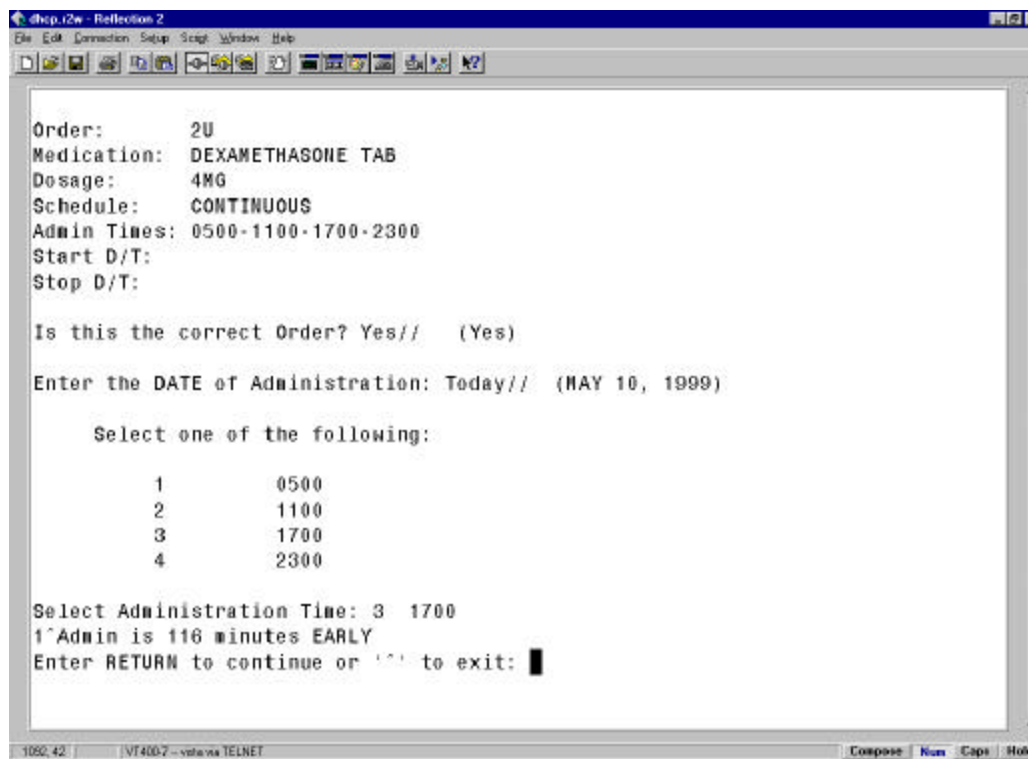
BCMA will search the database for all orders for the selected patient on the entered date and return a list of orders, as shown in Exhibit 61, Medication Log Trouble Shooter Screen.

EXHIBIT 61: MEDICATION LOG TROUBLE SHOOTER SCREEN

3. At the Enter a Number (###): prompt, enter the number corresponding to the desired order shown in the screen. Press **<Enter>**.
- ➡ If the list is longer than one screen can display, the user will be prompted: Enter RETURN to continue or '^' to exit. Press **<Enter>** to display the rest of the list.
4. The selected order will display with the prompt: Is this the correct order? Yes//. If this is the correct order, type **Y** or press **<Enter>**.
5. At the Enter DATE of Administration: Today// prompt, press **<Enter>** to select today's date. Otherwise, enter another date and press **<Enter>**.
6. If there are more than one administration time for the order, the times will be listed on the screen. At the Select Admin Time prompt, type the number corresponding the desired administration time, and press **<Enter>**.
7. The screen will display the variance reason for why the medication is not scanning. The reason will display on the GUI screen being used by the nurse passing medications for that administration time.

Exhibit 62, Order Validation Screen, shows the prompts and responses described in steps 4 through 7 above.

EXHIBIT 62: ORDER VALIDATION SCREEN



The screenshot shows a Telnet window titled "dhp.12w - Reflection 2" with a menu bar (File, Edit, Connection, Setup, Script, Window, Help) and a toolbar. The main window displays the following text:

```
Order:      2U
Medication: DEXAMETHASONE TAB
Dosage:     4MG
Schedule:   CONTINUOUS
Admin Times: 0500-1100-1700-2300
Start D/T:
Stop D/T:

Is this the correct Order? Yes//  (Yes)

Enter the DATE of Administration: Today//  (MAY 10, 1999)

  Select one of the following:

      1      0500
      2      1100
      3      1700
      4      2300

Select Administration Time: 3  1700
1*Admin is 116 minutes EARLY
Enter RETURN to continue or '^' to exit: █
```

At the bottom of the window, there is a status bar showing "1050, 42" and "VT400.2 - vntava TELNET". On the right side of the status bar are buttons for "Compose", "Num", "Caps", and "Hold".

8. To return to the list of medications for the selected patient and administration date, press **<Enter>**. To exit the option, press **^**.

4 GLOSSARY

This section contains acronyms and definitions for terms used in this document.

4.1 Acronyms

BCMA	Bar Code Med Admin
CHUI	Character-based User Interface
CPRS	Computerized Patient Record System
GUI	Graphical User Interface
HFS	Host File Server
HSM	Hospital supplied self-medications
IEN	Internal Entry Number
MAH	Medication Administration History
N/F	Non-formulary
PC	Personal computer
PRN	Pro Re Nata [Latin]
SM	Self-medications
TCP/IP	Transmission Control Protocol/Internet Protocol
VA	Department of Veterans Affairs
VAMC	Veterans Affairs Medical Center
VDL	Virtual Due List
VHA	Veterans Health Administration
VISN	Veterans Integrated Services Network
VISTA	Veterans Health Information Systems and Technology Architecture

4.2 Definitions

Audits	Tracking changes to records including old data, new data, and the name of the user who made the change.
BCMA	A VISTA software application that will validate medications against active orders prior to being administered to the patient.
CPRS	A VISTA software application that provides an integrated patient record system for use by clinicians, managers, quality assurance staff, and researchers.
Given	When a medication is administered to the patient, it is considered Given.

HFS	Host File Server is a system (WinNT/Dec Alpha) file access mechanism that enables the M software to access the system-level files.
IEN Drug Code	The internal drug number (IEN) that is entered into Inpatient Medications V. 5.0
Not Given	A medication that is intentionally Not Given for a specified reason.
Omitted	A medication that was not given during the medication pass because it was unintentionally missed.
PRN	Latin abbreviation for <i>pro re nata</i> meaning “as needed.”
ScreenMan	VA FileMan's ScreenMan utility provides a screen-oriented interface for editing and displaying data.
SRS	Document which outlines the functional requirements for a project.
TCP/IP	A protocol developed by the Department of Defense for communications between computers. TCP/IP has become the standard for data transmission over networks, including the Internet.
VA FileMan	VISTA 's database management system.
VDL	The Virtual Due List is a GUI application used by nurses when administering medications.

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